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ABSTRACT

The Youth Employment and Demonstration Projects Act of 1977 provided more than two hundred million dollars annually for a range of research, evaluation, and demonstration activities intended to increase understanding of the employment problems of youth and to help determine the most effective policies and programs to address these problems. The broad-ranging activities conducted under this mandate were labeled the youth "knowledge development" effort. This report shows how to review, synthesize, and disseminate information emerging from the knowledge development effort. The report is divided into three parts. The first part defines knowledge development, provides background information about it, and discusses strategy for knowledge dissemination and application. The second part of the paper uses the school-to-work transition as an example of the knowledge development process and explains how to gain knowledge using specific information gathered from school-to-work transition projects. The final part of the report discusses methods of translating information into knowledge and policy. (KC)

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YOUTH KNOWLEDGE DEVELOPMENT:
THE PROCESS AND THE PRODUCT

Robert Taggart

January 1981

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FOREWORD

This analysis, prepared for a September 1980 Conference on Knowledge Utilization sponsored by the Department of Labor, is a product of the Youth Knowledge Development Project supported by the Charles Stewart Mott Foundation with supplementation from the Edna McConnell Clark Foundation. The purpose of this project is to review, synthesize and disseminate information emerging from the "knowledge development" effort--a coordinated series of research, demonstration and evaluation activities mounted under the Youth Employment and Demonstration Projects Act of 1977 to determine the causes, consequences and cures for youth unemployment. Hence, the project relies heavily on public information provided through the cooperation of the Office of Youth Programs of the Department of Labor and its contractors. Neither the Mott and Clark Foundations, which provide support, nor the Office of Youth Programs, which provides the raw material for the Youth Knowledge Development Project, bears responsibility for the quality of the analysis or the conclusions.

Having served as the Administrator of the Office of Youth Programs during the conceptualization and implementation of the knowledge development effort, my analysis of the process and its product is clearly a subjective assessment from a very involved perspective. Many of the decisions underlying the knowledge development effort were made in anticipation of certain follow-through actions. The explanations of how these longer-range plans affected short-term decisions does not mean that the plans are necessarily most appropriate now, or that they are necessarily the current policy of the Office of Youth Programs.

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WHAT IS "KNOWLEDGE DEVELOPMENT"?

The Background

The Youth Employment and Demonstration Projects Act of 1977 (YEDPA) authorized and provided more than two hundred million dollars annually for a range of research, evaluation and demonstration activities intended to increase understanding of the employment problems of youth and to help determine the most effective policies and programs to address these problems. This mandate, and the broad-ranging activities implemented to meet it, were labelled the youth "knowledge development" effort.

In the 15 years preceding YEDPA, a massive array of research and demonstration activity had been directed to the youth employment issue. Under the War on Poverty, and continuing under the Comprehensive Employment and Training Act (CETA), there had been hundreds of experimental projects testing alternative approaches as well as volumes of analysis exploring causes and consequences. While much had been learned from these efforts, it was the Congressional and public perception that fundamental questions remained unanswered which needed to be addressed before designing youth policies for the 1980s.

It is ironic that we knew as much or more about youth employment problems and programs than about any other major social welfare subject, yet remained uncertain about a range of very fundamental issues. To achieve the YEDPA "knowledge development" mandate, it was first necessary to understand the reasons why substantial previous investments in research, evaluation and demonstration projects had not yielded a greater payoff in answering key policy questions:

First, past demonstrations mainly focused on trying out new ideas and approaches. They were rarely implemented in multiple sites with the varying conditions and large sample sizes necessary to reliably capture the modest impacts of short-term interventions or to predict success in varied settings.

Second, too little attention was paid to "bread and butter" issues; with the rewards all for "innovation," there was not enough focus on how to improve conventional programs and practices. Program evaluations were frequently launched simply to defend funding levels and focused little on critical process issues, i.e., the "how-to-do-it" rather than "what-to-do" questions.

Third, the efforts were too balkanized. Rarely were research, demonstration and evaluation activities coordinated to focus on the same issues. "Rigorous" statistical studies too often ignored "soft" process evaluations and as a result became little more than econometric exercises. The research community concentrated primarily on esoteric model building and testing from available data sets. The projects funded by the Department of Labor put perhaps too much emphasis on economic outcomes and too little on the psychological and behavioral changes so important in understanding the youth experience. Studies by other agencies frequently ignored employment issues.

Fourth, there was minimal attention to dissemination and synthesis. Balkanization reduced the potential for comparability and integration across studies, but even this constrained potential was far from being realized. Hundreds if not thousands of reports simply disappeared into the bowels of the sponsoring bureaucracies. As a result, many promising and important findings were ignored, and there was much overlap and duplication in the effort.

Fifth, and perhaps most critical, the lessons which were learned were rarely applied. There was no planned process of replicating promising ideas, no mechanisms for implementing improvements in conventional approaches, and few direct inputs into the policy process. Not enough attention was devoted to the translation of research, evaluation and demonstration findings into terms that could be utilized by practitioners and policymakers, who, in turn, frequently ignored significant findings.

In summary, past knowledge development efforts were not sufficiently balanced, coordinated, disseminated or operationalized. This is not surprising since these activities were exploring new terrain, since the techniques and skilled personnel for research, evaluation and social experimentation had to be developed, since resources were inadequate to pursue a compehensive strategy, and since employment and training efforts were growing so quickly that there was little time to think through policies and approaches. But these pitfalls had to be avoided in order for the massive YEDPA knowledge development investment to have a reasonable yield.

To improve the coordination, balance, dissemination and operationalization of research, evaluation and demonstration activities under YEDPA, three annual "knowledge development plans" were prepared which provided the framework for the use of discretionary authority under YEDPA and also the Summer Youth Employment Program (SYEP) and Job Corps for fiscal 1978 through fiscal 1981. The first plan, developed in light of YEDPA's initial one-year authorization limit, emphasized the "first order" issues needed to legislate more effective youth programs. The second plan finetuned the questions and better structured the activities to address more detailed administrative, service mix and target group issues and to test longer duration interventions. The third plan stressed follow-through on previous activities but also emphasized dissemination and application of the findings. Each of these plans outlined the specific research, evaluation and demonstration activities that would be undertaken, the policy, theory or operational questions to which they would be addressed, and the timeframes in which results would be forthcoming. With minimal deviation, the outlined activities were, in fact, implemented.

The emphases and products of knowledge development activities were time sequenced. Research from existing data sets and syntheses of previous research were undertaken first and most rapidly in order to provide a foundation for further activity. Evaluations of existing programs such as SYEP and Job Corps were initiated and mechanisms established to assess the new YEDPA program experience to get these results as early as possible. Multiple-site demonstrations were put into place to test relatively conventional approaches under adequately controlled circumstances. Promising innovative approaches from past demonstrations were identified

and replication was attempted at a more measured pace to see if success could be achieved in alternative circumstances. Untried ideas and methods were implemented in a smaller number of sites on a somewhat slower time track because of the necessary lags in design and development. The research and evaluation findings were widely disseminated as soon as they became available and applied in policy deliberations including the Vice President's Task Force on Youth Employment, which was funded as one of the knowledge development activities to integrate the early findings into the Administration's youth policy recommendations for the 1980s. Institutional arrangements were developed under the third plan for continuing dissemination and synthesis, while administrative mechanisms were established to operationalize the results in ongoing programs.

There has been an accelerating volume of output from these research, evaluation and demonstration activities, the first of which were initiated in 1978, with many still continuing. The dissemination and application mechanisms are now beginning to be utilized fully. Without an understanding of the structure of the activities, the way in which they were implemented, and the different types of knowledge they are generating (as well as the other purposes they serve) it is easy to be overwhelmed by the volume of information.

By the same token, it is also critical to understand the epistemological issues. With so many different types and sources of information, there are inherent problems in determining the validity and relative weight to be given each element, as well as in synthesizing and interpreting both "hard" and "soft" information. The null hypotheses which, stated or unstated, are the basis for forming judgements, plus the standards of significance in the proof or negation of these hypotheses, must be carefully formulated. There is also the need to translate "rigorous" quantitative as well as judgemental information into "useable" information which will affect policy and programs. Much can be lost in this translation.

While understanding of these epistemological issues, as well as of the design and implementation of the knowledge development and utilization strategies, are absolutely necessary if more than a small portion of the resulting information is to become useable and applied knowledge, the youth knowledge development effort has a much broader significance. These research, evaluation and demonstration activities represent the largest scale effort to date in social experimentation and social engineering. The accomplishments and limitations of the process are extremely important as we increasingly utilize the tools of social science to develop and assess public policies.

The Knowledge Development Strategy

The foundation of the knowledge development plans and the first step in the process was to define major policy issues or questions based upon legislative concerns, administrative goals and directions, the state-of-the-art and inventories of existing knowledge. An iterative process was used in issue definition, addressing first order policy questions, then subdividing these into subsets of questions focusing on the causes, con-

sequences and likely cures of the underlying problems, the effectiveness of alternative intervention strategies with different client groups, how these strategies could best be implemented, and by whom they could best be directed.

The next step was to design a coordinated set of research, evaluation and demonstration activiites to address each of these subsets of questions. Research activities included (1) theoretical, quantitative analyses from existing data sets; (2) reviews and summaries of the literature relative to each of the detailed questions; (3) consensus resolution activities including identification of accepted model programs or practices, and the determination of practitioners' views on the issues; and (4) the implementation of new surveys and data sets where core information was otherwise lacking. The research thus included both "rigorous" and "soft" analyses; it ranged from the most abstract to the most applied; it aimed to synthesize existing knowledge, mine new knowledge from existing but underutilized sources, as well as adding completely new sources of information.

Evaluation activities focused on learning more about the detailed characteristics of participants, activities and delivery approaches under existing and newly implemented programs, assessing underlying processes such as institutional change, operational learning curves, and replication, as well as determining intervention impacts. All major programs were evaluated including Job Corps, the Summer Youth Employment Program and the new YEDPA programs. Each major dimension (such as planning, design and management) and activity cluster (such as work experience, vocational exploration or advanced training) were also studied. A range of evaluation techniques were used in most instances including descriptive case studies and ethnographic evaluations, quantitative descriptive analyses of inputs and flows, monitoring-oriented assessments of both a statistical and judgemental nature, as well as sophisticated quantitative impact evaluations.

Demonstration activities were undertaken to narrow the range of treatment variables, to better control the selection and flow of participants, and to more accurately measure status change, in order to permit more refined assessment of outcomes of alternative service combinations and delivery mechanisms with different target groups. Most of the YEDPA demonstrations tested existing and quite basic employment and training activities for youth in multi-site, controlled conditions. The aim was to cover all the major components of employment and training services and, for each one, to introduce planned variations in mix, service groups and delivery agents. Other demonstrations sought to package the elements in a particular way to carefully test whether this reformulation or packaging improved effectiveness. For instance, Youth Incentive Entitlement Pilot Projects or Entitlement, which was one of the four programs created under YEDPA, guaranteed in-school jobs subject to school performance, in other words, providing relatively standardized in-school jobs but linking them to school attendance and providing them on a guarantee basis. Several of the demonstrations addressed underlying theoretical and normative issues such as the appropriate mix of youth and adults, or of rich and poor youth. Replication experiments sought to implement newer concepts or packages of services which had been tried on a limited scale with some success. Other demonstrations explored entirely untried concepts or approaches on a limited scale with the aim of determining their general feasibility. In

some cases the primary thrust was to promote institutional change and to study the ways and means, i.e., to explore processes more than outcomes. Replication experiments focused on whether a program approach which proved effective in one circumstance could be implemented elsewhere and how this could best be achieved. These various demonstration categories and emphases were not mutually exclusive, but there was wide and conscious variance in the rigidity of design, the emphasis on and expenditure for evaluation per se, the choice of administrative arrangements, and the procedures for site selection or development, based upon their intended role in the overall strategy. At the one extreme were random assignment experiments with planned variations and rigid maintenance of service mix variables and testing schedules. At the other extreme were incentive fundings for linkage activities where the concern was mostly with the institutional change efforts. In most cases, however, there was some degree of both process and impact evaluation. Whenever administratively feasible, comparison group procedures were utilized, and as often as possible, random assignment control group methods were employed.

For all the identified issues and subquestions, the aim was to have a coordinated array of activities so that each question would be addressed by basic research from existing data, literature summaries, consensus or state-of-the-art determinations, new data developed specifically to fill information gaps, impact and process evaluations of existing programs including rigorous statistical as well as observational assessments, structured demonstrations of conventional approaches, incentive efforts to move institutions, tests of the replicability of promising models or approaches and some exploration of untried ideas. Each research, evaluation or demonstration activity was designed to address as many issues as possible and to gather information that could serve multiple purposes.

In addition to the initial structuring of activities to address key policy issues, there were several mechanisms to increase the synergy between separate research, evaluation and demonstration efforts. The primary element was the Standardized Assessment System which covered roughly half of the demonstration projects by dollar value (outside of the legislated Youth Incentive Entitlement Pilot Projects)--demonstrations which have served over 50,000 youth.

The Standardized Assessment System (SAS) was designed to provide a uniform data base across a wide variety of programs; to gather comprehensive information about participant characteristics; to track in-program changes in attitudes and awarenesses; to describe services delivered and the program setting; to report on a range of possible outcomes in a consistent fashion; and to provide a foundation for longer-term assessment of impacts by providing all the information necessary for construction or refinement of control groups as a baseline for multi-year tracking utilizing Social Security records. A secondary aim was to develop and test psychometric measures and program evaluation techniques. The SAS included:

(1) Measures of participant characteristics such as age, sex, race, economic and marital status considered essential for describing the sample composition of a given program as well as for use as control variables in data analyses of program effects.

(2) A psychometric battery composed of subsets of questions designed to measure at entry and exit vocational attitudes, work related attitudes, sex stereotypes in career thinking, job holding and job seeking skills, self-esteem and job knowledge.

(3) Standardized process information for each project describing its qualitative dimensions, inputs and costs in order to compare and contrast program approaches across different local projects as well as across demonstrations, and to correlate these features with outcomes.

(4) A performance outcome questionnaire measuring the participant's status at the completion of the program, his or her assessment of the program experience, as well as staff assessments of the participant.

(5) A follow-up instrument providing performance indices regarding the nature and extent of "success" achieved by the individual.

(6) A standardized schedule and set of instructions for the application of these instruments, for instance, requiring regularized three- and eight-month follow-ups after program termination.

There was also an effort to assure the standardization of certain core information across other major research and evaluation activities. A National Longitudinal Survey of Youth was initiated gathering much ofthe same information as the SAS participant profile and making it possible to do some matching using the SAS psychometric battery and the NLS. The SAS psychometric battery was included on a test basis for one cohort under the Continuous Longitudinal Manpower Survey which was being used to assess the experience of youth participants in local CETA programs. The evaluation findings for Job Corps as a whole were designed so as to be useful in assessing the impacts of several Job Corps demonstration efforts, as well as providing a benefit-cost framework for assessing the comparative effectiveness of other programs. Research, evaluation or demonstration agents in many cases were given responsibilities over clusters of related activities--i.e., in-school programs, private sector programs or special needs groups efforts--with the aim of assuring consistent research and evaluation and the integration of findings from different activities. Finally, there was a degree of uniformity which occurred implicitly as a result of the centralized nature of the design effort within the Office of Youth Programs, as well as informal sharing of research designs and instruments by demonstration and research agents.

In summary, the enormously varied and multifaceted activities constituting the knowledge development effort were interrelated by initial design, standardized instrumentation, and in many cases coordinated administration. Each research, evaluation or demonstration activity was designed to provide varied information on a range of issues, so that there would be potential for an almost limitless array of cross-cutting assessments of every imaginable question related to youth employment and development.

Knowledge Dissemination and Application Strategy

Despite this rational structure, the knowledge development effort was anything but a sterile academic exercise; it was action oriented, highly integrated with policy and program operations, and a major tool of institutional change. The varied demonstrations provided employment and training opportunities for tens of thousands of youth. Of the two-fifths of a billion dollars in discretionary funds available in fiscal 1978 and 1979 (inclusive of Entitlement), only 3.3 percent went for basic research, .6 percent for regular program evaluation, 5.3 percent for evaluation of demonstration projects and 2.8 percent for technical assistance and linkage activity. The remainder was for project activities providing jobs, training and other services directly to youth. These resources were not allocated by formula or regulation to specific delivery agents, so that there were many claimants for these discretionary resources. YEDPA mandated "special consideration" for community-based groups in the use of these funds as well as the involvement of other federal agencies, the use of secondary and post-secondary schools, the apprenticeship system and the Employment Service.

Rather than passively reacting to the pressure of interest groups, an active and conscious involvement strategy was adopted from the outset which sought to identify the complete range of institutions that could and should be involved, their areas of possible comparative advantage and interest, and then to utilize these institutions in structured demonstration projects where their effectiveness could be tested. The knowledge development plan was, in a sense, a protective system; to get funding, institutions had to adapt to the design and structure of demonstration approaches. The projects were recognized from the outset as temporary, with integration into regular programming depending on assessed performance. The overlay of research requirements and outside evaluation agents was a disciplining force, serving a monitoring and management function which would not otherwise have been possible given limited staffing in the Office of Youth Programs. Deliverers were forced to move carefully; to think through their delivery approaches and mixes; and in many cases to develop in-house capabilities to respond to research, evaluation and demonstration requirements. Yet the standardization of assessment and demonstration procedures also allowed the participation of many groups which could not have developed research or evaluation designs on their own.

There was an equal effort to balance the allocation of the research, evaluation, technical assistance and linkage funds--i.e., those which did not involve direct delivery of services to youth and for which there were an enormous diversity of claimants--in a way to assure the integrity of these activities and yet to involve as many groups as possible, such as minority firms and minority colleges as well as public interest groups. Involvement was, again, structured under the terms of the knowledge development plans.

As a result of this strategy, a vast array of institutions were involved in knowledge development, as indicated by the 440 page description of funding actions and funded agents for fiscal 1978 and 1979. Yet the division of these resources generated almost no controversy. Of discretionary funds for direct delivery of services at the local level (ex-

cluding Entitlement), prime sponsors received two-fifths, community-based groups almost half, and schools, unions and private employers the remainder. Three-tenths of all funds excluding Entitlement were passed through other federal agencies for administration of knowledge development activities specified under interagency agreements; these funds were then distributed to local delivery agents. Another sixth of resources went for activities directly funded by the Department of Labor but under terms of agreements with other federal agencies. Minority firms, community groups and minority colleges received a sixth of funds available for basic research, program evaluation, demonstration project assessment and technical assistance. Conscious outreach occurred to involve groups such as voluntary youth serving agencies and the full-spectrum of education interest groups on the supposition that this could lead to improved programming and could help avoid conflicts. At the same time, the groups were required to participate within the knowledge development framework which provided firm ground for assessing their comparative effectiveness. In the demonstrations for most types of activities, all possible delivery agents were given a "try-out" under roughly equal terms to see which could do best.

The long-term aim of this involvement strategy was to develop institutional mechanisms for the replication and support of successful project models as well as for the dissemination and application of findings within the "normal" administrative framework of employment and training programs which distributes resources by formula directly to local prime sponsors subject to their decision about their uses rather than funding of activities from the national level. The notion was that after two or three years of demonstration activity, the effective approaches and most effective delivery agents could be determined on relatively rigorous grounds. Instead of continued funding directly from Washington, the money would instead be channeled to prime sponsors as incentives to match funds distributed to them by formula where they used these funds to implement models of proven effectiveness. The idea was that for each defined model or approach eligible for federal matching, there would be an experienced national replication agent or institution which would provide hands-on assistance in the implementation and maintenance of this approach in local areas choosing to use their resources and to receive a federal matching contribution for these models. These agents would be the national groups sponsoring the most effective demonstrations and thereby having acquired significant expertise. Some federal support would be provided directly to such agents, but primarily, resources would come from the prime sponsors out of the incentive funds. This would leave prime sponosrs the flexibility to choose the types of approaches desired from a menu of choices for which incentives would be offered, but would assure effective implementation of the models with the help of outside institutions with proven expertise; in other words, this would assure local flexibility without having to "reinvent the wheel" in each local context. The incentive grant notion was a fundamental part of the Department of Labor's legislative proposals to the Administration and of the Administration's proposals to Congress. The matching approach is already being used as a replication strategy for some of the demonstration projects where the experimental phase has already concluded.

A similar strategy was planned to provide applied, intensive and comprehensive technical assistance in substantive areas of local youth programming. With limited funds, past-ETA efforts at technical assistance have been top-down, focused mostly on administrative and procedural issues and reaching only the top echelon of decisionmakers in any community. Drastically expanded efforts were anticipated to utilize the knowledge developed under the research, evaluation and demonstration activities. There would be a designated "brokering agent" for each substantive area such as education, training, assessment, supervision, job development and the like. The designated broker would develop a full spectrum of services--workshops on a variety of subjects, conferences, materials inventories, arrangements for staff training in local institutions, and technical assistance guides. It would be responsible also for reviewing relevant OYP knowledge development products including any demonstration findings, and synthesizing these into the materials and activities. Upon requests by the prime sponsor, the brokering agent would conduct a top-to-bottom review of locally utilized materials, procedures, personnel and management, and involved or potentially involved institutions related to the subject area. It would develop a matrix of needs and possible strategies to meet these needs, drawing on its "full-service" spectrum of possible assistance. An agreement or contract would then be developed with the prime sponsor to provide specified assistance which would be brokered by the agent over an extended period. At the end of the delivery period, the prime sponsor would rate the broker's performance. The broker would network local individuals, periodically mailing information on the subject in order to maintain contact, interest and interchange among local experts in specific subject areas.

Paralleling the incentives for model programs, the prime sponsor would be offered a menu of technical assistance choices which would be supported by matching money from the Department of Labor. Efforts are already underway to fill out this menu, with brokers funded in the areas of supervision, job development, training, youth participation, education, school-to-work transition, computer usage, counseling and guidance. Each year, the prime sponsor would assess its substantive weaknesses in youth programming. It would prioritize and select focus areas for the year from the menu of choices. National discretionary funds earmarked for local technical assistance would be distributed by formula to prime sponsors, perhaps matched by their administrative money, to contract with the agents on the designated menu (or to prepare and develop their own alternate improvement plans). The Regional Offices of DOL would approve the prioritization and general needs assessments based on their reviews of operational effectiveness. This would be a way of letting the "market" work, assuring local choice and adapting to local needs, while also maintaining the quality of performance and making capacity building a fundamental activity of the prime sponsors integrated into the regular planning, grant and review cycle used in CETA program activities. It would also be a mechanism for disseminating findings of knowledge development.

In other words, the "involvement strategy" used in the selection of research evaluation and delivery agents was structured to build up the expertise for the involved groups and institutions to provide assistance in the replication of specific proven models under an incentive grant structrue, as well as intensive technical assistance on specific substantive

components of youth programming through the brokering approach supported by matching grants. Involvement was, thus, a major element in the knowledge dissemination and utilization strategy.

But dissemination and utilization were also ongoing activities. The findings of research and evaluation were applied as they became available. Perhaps the most significant example is in the development of the Administration's proposals for new youth legislation. YEDPA was initially authorized for one year and then extended through fiscal 1980. One of its mandates was to provide the information needed to design legislation for youth programs and policies for the 1980s. Since such activities involved the education community and other institutions outside the orbit of the Department of Labor, the Office of Youth Programs initiated the idea, provided funding for and shared administrative responsibility with the Vice President's Task Force on Youth Employment. The Task Force had a three-part mission: first, to synthesize available research, evaluation and demonstration project information as background for the legislation; second, to conduct consensus building activities to determine and build support for a set of workable recommendations; and third, to provide exposure for the Administration's accomplishments in the youth arena. Most of the Task Force's analysis was based on the early research and evaluation findings of the knowledge development effort. Most of the consensus building was focused around the groups that were linked under the involvement strategy. The sites and activities which were publicized as examples of accomplishment were those funded under YEDPA. Further, the major concepts eventually introduced in the President's legislative recommendations were those already prototyped under a multisite demonstration program implemented specifically to try out new approaches--the Consolidated Youth Employment Program.

There were other less visible interactions between knowledge development activities and program decisions. The new brokering and incentive grant mechanisms were intended as supplements to, rather than substitutes for, traditional means of disseminating and applying ideas. There have been a plethora of technical assistance guides, research reports, conferences, regulatory explanations, model project catalogues and the like distributed to prime sponsors and delivery agents. These utilized the early findings of the knowledge development efforts. However, the magnitude and structure of the youth knowledge development effort put a premium on organization of findings and widespread dissemination, so that a system was initiated by the Office of Youth Programs of the Department of Labor for structuring, publishing and disseminating the written products of all major research, evaluation and demonstration activities supported directly by or mounted in conjunction with the knowledge development effort. This continuing series of Youth Knowledge Development Reports is divided into twelve broad categories:

1. Knowledge Development Framework includes reports concerned with the structure of knowledge development activities and the assessment methodologies which are employed, validation of measurement instruments, and the translation of knowledge into policy.

2. Research on Youth Employment and Employability Development includes analyses of existing data, presentation of findings from new data sources and special studies of youth labor market problems.

3. Program Evaluations includes impact, process and benefit-cost evaluations of CETA youth programs and related activities such as the Targeted Jobs Tax Credit.

4. Service and Participant Mix includes the findings concerning the matching of different types of youth with different service combinations, experiments with work vs. work plus remediation vs. straight remediation as treatment options, and attempts to mix disadvantaged and more affluent participants, as well as youth with older workers.

5. Education and Training Approaches includes the results of structured experiments to test the impact and effectiveness of alternative education and vocational training approaches, for instance, tests of alternative schools and computer assisted instruction.

6. Pre-Employment and Transition Services includes the findings of structured experiments to test the impact and effectiveness of school-to-work transition activities, vocational exploration, job-search assistance and other efforts to better prepare in-school and out-of-school youth for labor market success.

7. Youth Work Experience includes assessments of work experience demonstrations, the value of output of work programs, and catalogues of job options.

8. Implementation Issues includes cross-cutting analyses of the practical lessons concerning "how-to-do-it" and of issues such as learning curves, replication processes and programmatic "batting averages" and the comparative advantages of alternatve delivery agents.

9. Design and Organizational Approaches includes assessments of demonstrations of alternative program and delivery arrangements such as consolidation, year-round preparation for summer programming, the use of incentives and multi-year tracking of individuals.

10. Special Needs Groups includes the findings of research, evaluation and demonstration activities concerned with the special problems of and adaptations needed for significant segments including minorities, young mothers, troubled youth, Indochinese refugees and the handicapped.

11. Innovative Approaches includes the findings of activities designed to explore new approaches including Youth Incentive Entitlement Pilot Projects, private sector initiatives, the national youth service experiment, and energy initiatives.

12. Institutional Linkages includes studies of institutional arrangements and linkages as well as assessments of demonstration activities to encourage coordination with education, volunteer groups, drug abuse agencies and the like.

Each product of merit resulting from discrete demonstration, research and evaluation activities is classified in one of these twelve broad knowledge development categories, described in terms of the more specific issue, activity or cluster of activities to which it is addressed, with an

identifier of the product and what it represents relative to other products in the demonstration. It is, then, overviewed to highlight key findings, suggest significant interconnections with other findings, and provide an interpretative context. The reports are processed as rapidly as possible so that interim results are available in a timely fashion, i.e., the impacts for the first year participants of a planned two-year demonstration will be published separately from the second year findings in order to avoid delays. In other words, there will be a constantly accumulating series of Youth Knowledge Development Reports as the activities are completed over the next several years.

The distribution of the reports is very broad, with targeting to user audiences and particular attention to the involvement of developing institutions, community-based organizations, and related institutions outside of the employment and training community. Nearly seventy volumes are already published or in the pipeline. These reports contain more information than needed by any single user, but there is also a system for synthesizing and translating the results for various audiences. For instance, analytic cross-cuts are already underway on a variety of subjects such as the findings on motivation and attitudinal change among youth, what has been learned about work programs, replication and stabilization processes, entrepreneurship efforts, the success of private sector initiatives and standardized benefit-cost analyses of the demonstration projects. A series of practitioner-oriented syntheses of the information produced by the knowledge development effort is also planned which would provide handbooks or how-to-do-it guides on applied subjects such as how to design and operate effective work projects, job search assistance, and vocational exploration approaches. In other words, many of the model approaches and cross-cutting theoretical findings will be combined with practitioners' viewpoints and process evaluation findings in a form useful at the delivery level.

SCHOOL-TO-WORK TRANSITION: AN EXAMPLE OF THE KNOWLEDGE DEVELOPMENT PROCESS

Defining Transition Issues

This brief overview suggests the thrust and organization of the knowledge development and utilization effort, but it is useful to focus on a single subset of the subjects covered in order to illustrate the structure and approach more fully. One example is the school-to-work transition issue--the difficulties youth face in finding first jobs part-time during school and in the summer, in learning about the world-of-work and making career decisions, leaving school and entering the first bridge or career job. School-to-work transition interventions include in-school efforts to improve the labor market awareness and occupational choices of students, to develop the basic employability skills demanded in the labor market, to remediate where severe educational and behavioral problems act as barriers to employment, to provide help in securing and successfully navigating labor market entry, and, in some cases, to offer first work experiences. A range of assistance may be provided to help achieve these ends--testing and individualized career planning, counseling, basic life

skills training, exploration of vocations in the classroom or through job site rotation, remedial education, skills training, motivational efforts, assistance in overcoming sex stereotyping, part-time work experience in the public sector or subsidized on-the-job training in the private sector, supportive services to meet special needs, placement assistance and follow-up help. School-to-work transition projects vary in the mix and intensity of such services. They may be limited to a few hours weekly during the school year; they may provide a school year-summer continuum; or they may even be organized to deal with youth for a multi-year period of maturation. The transition services may be a component in a comprehensive alternative education curriculum or an after-school add-on. They may be combined with, or even limited to, work experience. The activities may be delivered by school personnel, community-based organizations, prime sponsors, private employers, unions or volunteers at the local level.

Such services are provided under a range of CETA programs and from other sources. Youth Employment and Training Programs (CETA Title IV) specifically designates funds for in-school transition activities. In-school projects are funded under the comprehensive CETA Title IIB serving adults and youth. Youth Incentive Entitlement Pilot Projects is an intensive work-oriented transition demonstration which guarantees jobs and also provides other services for youth who stay in school or return to school. The Summer Youth Employment Program, which serves predominantly students, now seeks to link the summer experience to a year-round continuum. Even the work-oriented Youth Community Conservation and Improvement Projects (CETA Title IV) serves some students for whom it provides the work component of school-based transition efforts. Taken together, these activities provide an estimated 250,000 slots during the school year, with summer programs aiding over 800,000 students, the former representing expenditures in excess of $300 million in fiscal 1980 and the latter over $800 million--a substantial share of the estimated $4 billion spent by CETA in 1980 on persons 22 and under (the remainder goes for expensive interventions such as Job Corps, public service employment, work experience, and classroom training for out-of-school youth). Transition activities are also provided by schools themselves under career, co-operative and vocational education and by regular school counselors. Coordination between CETA and schools, particularly with these other school-based programs, is a critical feature. CETA efforts are focused on the economically disadvantaged and minorities much more than school-sponsored activities, but within the wide range of CETA school-to-work transition efforts, there is enormous variance in client groups, ranging from the mentally handicapped with severe impediments to the fully employable who need only information and a helping hand, from 14 and 15 year olds who will not transition for several years to those who have just left school and are looking for career entry.

Because of the multi-faceted nature of the school-to-work transition problem, the multiplicity of possible intervention strategies and the diversity of involved institutions, the definition of policy issues and underlying questions to be addressed by research, evaluation and demonstration activities was a particularly important yet complex undertaking. The first order questions to be addressed were posited in the first knowledge development plan:

- Does school retention and completion increase the future employability of potential dropouts and the disadvantaged?

- o Is subsidized employment a mechanism for increasing school retention and completion?
- o Can the school-to-work transition process be improved?
- o Are new institutional arrangements feasible?
- o Will increased labor market information and assistance ease the transition?
- o Can employer subsidies and other private sector approaches create new transition routes?

These were the obvious questions. In-school and summer work for students had been a mainstay of youth programming since the days of the Neighborhood Youth Corps. A major purpose was to provide jobs in order to keep youth in school, hence the concern with whether this was, in fact, one of the impacts, and if so, whether it was a worthy goal. There was overwhelming evidence that economically disadvantaged youth were handicapped relative to their peers in labor market knowledge, and some evidence from longitudinal studies that, all else being equal, those with more job knowledge did better subsequently in the labor market. This generated the concern with labor market information which subdivided into three issues--can knowledge be taught, how, and will it lead to better employment? The institutional focus was dictated by the fact that the transition process entails the movement of youth from the orbit of the educational system to the orbit of the employment and training system. The notions of academic credit for work experience involved both sets of institutions and the YEDPA legislation required that all in-school work experience include academic credit arrangements. What was uncertain was the best form of these arrangements, how they could be achieved, and whether they would change outcomes for youth. The employer subsidy questions were specified in YEDPA under the Youth Incentive Entitlement Pilot projects component which was to specifically experiment with 100 percent wage subsidies on the supposition that employers could not otherwise afford to hire inexperienced, disadvantaged students.

This level of generality, however, provided little guidance as to specific research, evaluation and demonstration activities which would address these questions and would add to what was already known. Fortunately, the Office of Policy Evaluation and Research in the Employment and Training Administration, prior to the passage of YEDPA, had commissioned an assessment of school-to-work transition problems and programs to determine the key questions and issues needing resolution. This survey, Between Two Worlds: Youth Transition From School to Work, focused on the questions which had been reasonably answered as well as those still needing to be explored. One of the first efforts of the Office of Youth Programs was also to conduct a state-of-the-art survey of all youth activities. This survey, Employment and Training Programs for Youth: What Works Best For Whom, provided conceptual background concerning what was known and still uncertain. Finally, a series of literature reviews was commissioned to determine the state-of-the-art in in-school guidance and counseling, academic credit for work experience, private sector involvement with schools, youth participation, and services to high risk and handicapped students.

With these documents as background, a good deal of effort and attention went into the issue definition process on a number of fronts. This is a dimension of the knowledge development effort which is frequently neglected, but if the wrong questions were asked, then the answers may not be particularly meaningful. Hence there was significant attention to achieving a balance in the perspectives and interests of the groups responsible for defining the issues so that the choice would not be biased. In the case of Entitlement (the demonstration guaranteeing part-time school year and full-time summer jobs to all 16-19 year-old poor students in designated areas), where the major issues were articulated in the law, the definition of subquestions was relatively easy; the problem was to prioritize among the many things that could be studied under such an ambitious experiment, as well as to design and implement a research plan that could address these questions effectively within resource constraints. The Manpower Demonstration Research Corporation, which had been established specifically to operate interagency demonstration programs and was structured with a Board of Directors representative of all segments of the community but with individually proven research expertise, was selected as the coordinating agent for Entitlement. Its research plan covered process, cost and impact issues. The impact questions were as follows:

-- What proportion of eligible youths enroll in the demonstration?

-- What are the socioeconomic and demographic characteristics of participants?

-- How do participants compare to non-participants?

-- What program design and environmental factors explain participation?

-- What is the impact of work and school performance requirements on the success of students already enrolled in school and on their retention in school?

-- What is the effect of the job guarantee on the return to high school or GED programs by former high school drop-outs, and their performance in such programs?

-- What is the impact of guaranteed jobs on the employment and unemployment rates of students?

-- What is the impact of work and other services on the post-high school earnings of students and former drop-outs?

In this case, it was not the questions alone which were critical, but also the priority on addressing them. For instance, only a minority of all youth drop out of school, even among the disadvantaged, and only a minority of these leave school for economic reasons that might be affected by the availability of part-time work. The effects on dropouts could be determined by rough and ready approaches such as examination of school records or teacher interviews, but precise, statistically-reliable estimates would require tracking a large sample of Entitlement youth and

others not receiving services in order to identify the marginal impacts with any statistical reliability. The research plan recommended by the Board of MDRC put high priority on the resolution of this question and thus recommended a far larger and costlier sample than initially envisioned by the Office of Youth Programs. This plan was eventually accepted because of MDRC Board's expertise and leverage.

Research needs were, thus, preeminent in the definition and prioritization of questions for Entitlement, with an aim to produce reliable impact estimates over the long run. But there were a number of activities concerned with immediate and very practical questions necessary to achieve the mandates of the new legislation--such as the requirements for academic credit for work experience and for agreements between prime sponsors and local education agents. Here, the concern in question formulation was to identify as rapidly as possible the instrumental variables and "sticking points" in achieving coordination, and, in fact to raise the questions to guide the dialogue between educators and employment and training personnel who were, in many local areas, communicating for the first time. Early in the life of the new programs, a series of Career Education/CETA mini-conferences were sponsored to clarify the issues, begin the dialogue and discover the most fruitful directions of interchange. The questions formulated in this process were quite different from those of Entitlement:

1. How can CETA prime sponsors and educators communicate their basic philosophies to each other and then reconcile their philosophical differences?

2. How do we effectively resolve terminology problems between prime sponsors and local education agencies (LEAs)?

3. How do we overcome educators' resistance to granting academic credit for Youth Employment and Training Programs (YETP) participation?

4. How can we establish adequate lead time for planning YETP efforts?

5. How can we integrate YETP into a master plan for career education?

6. How can we untangle the YETP "red tape" and improve the quality of YETP reporting services so that the program can more effectively reach youth?

7. How can we overcome the difficulties posed by fiscal year schedule differences between LEAs and the U.S. Department of Labor?

8. What is the best way to promote a positive image of CETA, especially YETP, to educators and the community?

9. What is the best way to combine LEA and prime sponsor expertise in a way that will result in better communication?

10. What is the best way to recruit eligible youth for all kinds of U.S. Department of Labor programs, especially for youth aged 16 and older?

11. How can we provide counselors with the type of preparation better suited for YETP participants' needs, and what is the best way to resolve the differences in wage rates of YETP personnel and school counselors?

12. What is the best way to get rid of the necessity for using a dual mechanism in order to solve a single problem?

13. How can we use YETP to help youth develop a better total lifestyle with community help?

14. What are the essential start-up problems that need to be solved in LEA/prime sponsor agreements?

A variety of "linkage-oriented" demonstration projects and practitioner-oriented research addressed these types of basic, immediate, process questions, as contrasted with Entitlement's longer-range, quantitatively-oriented impact questions. In between these two extremes were a number of questions about the best design, delivery and targeting of school-to-work transition activities, i.e., questions concerned with both processes and impacts. In order to define and address this range of issues in an orderly way, a special purpose nonprofit intermediary, Youthwork, Inc., was established by a number of private foundations under an agreement with the Departments of Labor and Education. An initial mission was, through "quick and dirty" literature surveys and through extended discussions with interest groups, to refine the questions related to school-to-work transition activities which needed to be addressed by demonstration projects. The Youthwork Board and staff were specifically selected with expertise in education and employment and training, with representation from all involved interest groups, and with a balance of ideological interests, to assure that the questions and their ultimate answers would not be biased. A first step was the prioritization of six "focus areas" considered by the Youthwork Board to be of greatest importance: career counseling and guidance, academic credit for work experience, private sector involvement, youth initiatives, and the transition problems of and activities for troubled youth and the handicapped. Within each of these focus areas, Youthwork developed a comprehensive agenda of issues and questions covering everything from the most applied to the most theoretical, as illustrated by the following questions for all Youthwork activities and for those specifically addressed to academic credit projects:

ISSUES	QUESTIONS
GENERIC TO ALL ACTIVITIES	
What forms of collaboration among employment, training, educational (including colleges and universities), rehabilitation institutions, and community-based organizations are the most effective and the most successful in facilitating the school-to-work transition sequence? Specifically, what forms of collaboration	1. What are the projected and long-term effects of the various school-to-work activities? For example, what are their abilities to identify and develop transferrable work skills?

and what structural arrangements best serve the young people in terms of placing them in private sector, unsubisdized jobs after program termination?

2. Which projects, what collaborative arrangements, and which transferrable skills will enable participants to acquire jobs?

3. What are the various relationships between the projects and employers? How did these relationships develop?

4. What is the nature of the interaction between project staffs and work supervisors?

5. How does job placement take place?

6. What is the relationship between work and classroom activities?

7. What agencies are involved in the projects? What are the roles of each agency? How were these roles developed?

8. What are the barriers to successful cooperation among these agencies and what strategies are utilized by these agencies to overcome them?

9. How do the various agencies perceive each other?

10. What is the product of the relationship among these agencies?

What is the relative effect and value of private sector vs. public sector job placement/experience in terms of skills acquired, later job placement, career and educational success and long-term employability? How is the type of job placement related to the age of participants?

1. What is the impact of the projects on students' knowledge of particular jobs, as well as their job holding and job seeking skills?

2. In what activities do students typically engage at employer sites?

3. What learning can be specifically associated with which types of job placements?

4. What is the impact of the programs on students' reading comprehension?

5. What is the impact of the projects on students' self-esteem?

6. What characteristics differentiate program completers, from program dropouts, from positive early terminations?

7. What is the relationship between the age of participants and the type of job placement they secure after program termination?

FOCUS AREA: ACADEMIC CREDIT FOR WORK EXPERIENCE

What do we know about the types of academic credit which are currently being awarded, by what kinds of institutions, for what kinds of work experience?

1. What program characteristics differentiate projects which offer academic credit for work experience from those that do not?

2. What are the different types of academic credit awarded and, in terms of student performance evaluations and differences in work experience, on what bases are credits awarded?

3. What program characteristics differentiate projects offering different types of academic credit?

What different placements are used in the work experience? Are they inside or outside a school system? Does the placement for the work experience affect the quality and the kind of information and skills acquired by the participants? If so, what kind of effect does it have?

1. In what activities do students typically engage at employer sites?

2. What is the nature of interaction between students and supervisors at job sites?

3. What learning can be specifically associated with what job placements?

4. What processes are utilized in assigning students to worksites?

5. What is the nature of the interaction between project staffs and work supervisors?

6. How does job development take place?

7. What do students feel they have learned from participating in the employer-based portion of the projects?

8. Is there a differential impact on students in terms of their job seeking skills, job holding skills, knowledge of particular jobs, and after-program job placements?

9. Are there differences between in-school site placements and out-of-school site placements?

What are the procedures for determining the awarding of academic credit and the measuring of competencies for basic as well as career skills?

1. For what basic skill competencies are what types of academic credit granted?

2. How are these basic skill competencies measured?

3. For what career skill competencies are what types of academic credit granted?

4. How are these career skill competencies measured?

To what extent are the academic credits awarded to participants, transferrable to other institutions, both within the same and in different school systems?	1. What types of academic credit, granted for what work experiences, are transferrable to what other institutions within the same school systems and in different school systems (other than ones originally granting the academic credit)? 2. How often does the transfer of academic credit occur? 3. Do systematic variations exist? 4. Are there differences in awarding academic credit for the same types of experience in differing school districts? 5. What is the extent to which these differences may be construed as institutional barriers which affect the ability of generalized programs to have the desired impact?

The issue and question framework developed by Youthwork, of which this is just part, covers the range of school-to-work transition issues. Other issues and questions could have been chosen and other priorities established. But at least an effort was made to let groups with balance and proven expertise make these decisions, with their judgements based on literature reviews in order to determine what was already known. Each of the separate research, demonstration and evaluation activities involved with the school-to-work transition process, in turn, had a narrowed set of issues and questions focused on specific dimensions within this broad range. In other words, the first order questions were set out in the overall Knowledge Development Plan, with second order questions developed from a variety of perspectives and even more detailed questions addressed under the separate activities implemented to explore refined dimensions of the transition process and problems. Clearly, school-to-work transition is not a simple subject. There are a variety of institutional, operational and impact issues which must be explored in the hierarchy of questions. The key point is that an attempt was made to formulate the hierarchy based on existing knowledge and practice, with consideration of a variety of perspectives.

Addressing the Issues Through Research, Evaluation and Demonstration Activities

In order to understand more about the dynamics and dimensions of the school-to-work transition process and the nature of transition problems, it

was necessary both to mine existing data sets and to develop new ones. The major sources of statistical information for school-age youth included the Longitudinal Survey of the Class of 1972, the Ohio State University National Longitudinal Survey and the Survey of Income and Education. A first order of business was, therefore, to rework these data sets to determine what additionally could be learned about school-to-work transition. One set of research efforts was implemented through the National Bureau of Economic Research which examined the long-term consequences of teenage unemployment, the causes of youth unemployment, the dynamics of labor force entry and participation, and the universe of need for assistance. Another set of studies was commissioned with the primary research agent involved in Class of 1972 data; these were to assess the determinants of occupation, salary and family status over the first four years out of school, to isolate the effects of labor market information, to better understand the process of skill acquisiton, to analyze the causes and consequences of frustrated expectations, as well as to determine the long-term effects of employment and training. Working jointly with the National Institute of Education, the data from the Survey of Income and Education were reanalyzed focusing on education and work issues. A series of studies were also commissioned to analyze the transition process using the Income Dynamics Panel and another to mine the Cornell University long-term follow-up of youth who had previously participated in pre-school education in order to determine the antecedents of current labor force patterns.

But these data sets, while yielding much important information, were not structured to definitively address certain issues such as the special problems of disadvantaged youth or the impacts of alternate government interventions. To provide such information, a new National Longitudinal Survey (NLS) was implemented to track over 12,000 14-21 year-olds for at least the next five years. The economically disadvantaged and Hispanics were oversampled by a considerable margin, and the questions dramatically expanded concerning schooling, curricula, and participation in employment and training programs.

Another major research investment was the longitudinal survey of economically disadvantaged youth in four sites operating Youth Incentive Entitlement Pilot Projects and in four control sites. The control site data, and its comparison to the Entitlement site data, will permit resolution of a number of questions about the dropout and school return decisions, the tradeoffs between work and education, and the long-term as well as short-term impacts of work during school. The sample of poor youth is quite large by any standard and the questions were developed in many regards to parallel the information provided in the new NLS.

The National Assessment is a broad-based survey of school-aged youth which covers literacy, labor market awareness, cultural values and other factors. It provides a snapshot every four or five years of the status of youth. Through Office of Youth Programs supplementation of an already planned survey funded by the Department of Education, a panel of questions was added to the 1980 survey of literacy to assess occupational awareness and work attitudes, paralleling as far as possible the questions in the Standardized Assessment System and the National Longitudinal Survey, as well as earlier versions of the National Assessment.

A major survey was also undertaken under the auspices of the National Occupational Information Corrdinating Committee to determine how school-aged youth learn about careers and job search. There was a companion survey of the various systems for providing occupational information.

Finally, detailed literature reviews were commissioned through Youthwork addressed to the specific policy questions related to each of the six focus areas: academic credit for work experience, youth participation, private sector involvement, career guidance and counseling, transition services for high risk youth, and those for handicapped youth.

In addition to these research efforts, a range of evaluations were also mounted to assess the affectiveness of existing local youth programs and specifically their school-to-work transition elements. The Continuous Longitudinal Manpower Survey is a system for tracking the in-program and post-program experiences of participants in adult CETA programs. With the implementation of YEDPA programs, a new panel of youth participants was added. A process evaluation of the new programs in a variety of local settings was commissioned through the National Council on Employment Policy. This evaluation had a particular emphasis on school and work issues. In the first year of YEDPA, the Office of Youth Programs, in conjunction with the Office of Education, evaluated school-CETA relations under the new programs in a sample of sites. There were also evaluations of in-school work experience including estimates of the value of output of in-school vs. out-of-school jobs. Finally, school-sponsored cooperative education programs--the model for YEDPA in-school efforts--were carefully evaluated.

However, because of the diversity of in-school activities in different local settings, program evaluations could not isolate marginal impacts or the relative effectiveness of different service mixes and delivery agents in serving various participant groups. For this reason, major emphasis was placed on structured demonstration efforts testing different targeting, delivery and service mix approaches. The largest of the demonstration efforts was Youth Incentive Entitlement Pilot Projects, which in 17 sites tested the notion of a school conditioned guarantee of part-time school year and full-time summer employment for all poor 16-19 year olds residing in designated communities. As indicated by the research questions, Entitlement sought to determine whether jobs would help retain youth in school and attract dropouts back, how many eligible youth would want to work, the feasibility of providing the required number of jobs in the public and private sectors, the in-program impacts on participants, particularly relative to their school attendance and performance, the effects on families and economies of Entitlement areas, and the post-program labor force impacts of any increased schooling and work experience. But Entitlement was more than a job guarantee program. It linked education and employment more than ever before and, in fact, a planned variation was implemented providing supplements to some of the sites to enrich services and provide alternative education and counseling as well as mechanisms for serving special needs groups in order to assess the effects of these enhancements. The local program provided for 100 percent wage subsidies in the private sector, and planned variations were introduced to determine the effectiveness of alternative subsidy formulae in attracting private sector employers. The possible displacement of regular employees was analyzed in

a special study as well as the private employer reactions to Entitlement youth. Substudies were also conducted of eligibility determination methods, quality of work, and adaptations needed in rural areas. In other words, the basic research was supplemented to address a range of issues beyond the feasibility and impacts of the Entitlement concept alone.

The Exemplary In-School Grant demonstration mounted through Youthwork has supported 86 local school-to-work transition projects. Sixty-six of these projects were selected under a national competition among proposals submitted through CETA prime sponsors by a range of local delivery agents. The aim of the competition was to promote cooperation between the CETA and education systems and to identify and reward "exemplary" projects defined by innovative concepts, the demonstrated effectiveness of delivery agents, and the promised linkages with local institutions. The remaining projects were developed on a noncompetitive basis to explore more innovative ideas and to "fill gaps" in the types of projects funded competitively, to achieve balanced geographic distribution, and to reach competent operators at a disadvantage in the "grantsmanship-oriented" competitive process.

In order to learn more about specific dimensions of transition activity, the grants were clustered into the six focus areas, and were larger (averaging $300,000) and longer duration (initially for 18 months to two years, with many extended an additional year) in order to provide a better base for assessing impacts and measuring learning curves. Youthwork provided some technical assistance and implemented a standardized management information system as well as a system for comprehensive process and impact evaluation.

In contrast to the Exemplary Grant Program's competitive and developmental approaches, which were intended to "let many flowers blossom," the Youth Career Development demonstration was designed at the federal level with multi-site replication of a designated prototype by nine national sponsors which dealt directly with affiliated local operators: the Women's Bureau and the Federal/State Employment Service in the Department of Labor, plus seven national community-based oganizations--the National Urban League, the Recruitment and Training Program, the National Council of Negro Women, SER/Jobs for Progress, the National Council of La Raza, the Puerto Rican Forum and PUSH. The notion was to test a set of transition services which did not emphasize work experience, which were within certain cost and enrollment parameters, and which could, therefore, offer a test of the relative effectiveness of different delivery agents (for instance, the Employment Service vs. the various community groups), different project emphases (efforts to overcome sex stereotyping in the case of NCNW and the Women's Bureau, a labor market information priority in the case of Employment Service, and the motivational focus of PUSH), and different ways to serve minority groups and females (as part of ethnic- or female-oriented community-based group projects or in more racially- and sex-balanced projects). The curriculum and approach for the Employment Service projects were very standardized, the CBO projects somewhat less so, while the Women's Bureau projects had significant site-to-site variance. There were some differences between the models adopted by the various umbrella organizations, and in all cases, local adaptations occurred under the umbrellas.

Taken together, then, the Youthwork and YCD projects represented the spectrum of school-to-work transition activities at the local level. Youthwork projects ranged from very intensive and comprehensive remedial efforts for a few individuals, to projects serving large numbers with low cost and limited duration services. The YCD projects were more closely clustered at the less intense end of the distribution, but there was overlap with Youthwork projects. Youthwork delivery agents were of all types but put heavy emphasis on regular and alternative schools and local community-based community groups not tied into national networks. YCD, on the other hand, drew on the traditional players in the employment and training system--the Employment Service and affiliates of the national community-based organizations. Every area of the country was covered by these projects. Some of the Youthwork in-school projects were innovative to the extreme but most were more conventional. The YCD Projects were relatively standardized transition services. In other words, the set of projects represented a "good mix" in terms of service profiles, project emphases, scale and intensity, operators and linkages.

Both the Youthwork and YCD projects utilized the Standardized Assessment System (SAS) and sought to secure comparison groups of youth at each site who did not participate. In the case of the Youthwork projects, there was a detailed Management Information System designed specifically to penetrate delivery level realities. The Youthwork projects were studied by ethnographic evaluations as well as structured case studies particularly focused on the institutional change and stabilization processes, linkage activities as well as the internal dynamics of project operations. The YCD projects were analyzed in reports by the sponsoring organizations, but the sites were also assessed by third party site visits. The impact assessment of YCD, using the SAS data, was handled by the Educational Testing Service, which also monitored compliance with research requirements. Some of the Youthwork projects as well as most of the YCD projects will operate for three years, so that the learning curve processes can be determined. Under YCD, some participants had two years of treatment (as juniors and seniors) so that the optimum duration of treatment also can be assessed.

The Vocational Exploration Demonstration Program activities tested variants of school-to-work transition activities emphasizing private sector exposure and experience. According to current CETA regulations, vocational exploration in the private sector or VEPS includes short-term "try-out" employment experiences lasting only until the youth proves productive, rotatonal assignments which expose youth to multiple jobs, career exploration in the classroom, private sector exposure through field trips and lectures by businessmen or union representatives, as well as training in basic skills required on the job. These types of activities were part of most Youthwork and YCD projects, but the VEDP put greater emphasis on the private sector dimensions and sought to define activity and approach alternatives and to structure careful tests of each. In sixteen sites, one or more specific program designs were implemented based on four models: rotational assignments to worksites; introductory vocational training or exposure in an institutional training setting; basic life skills instruction; and a multi-modal approach which combines rotational work, vocational exposure and life skills training. Varying durations of services were also tested, with random assignment of youth to different models of different specified durations. The impacts of each type and

duration of treatment are being evaluated for both in-school and out-of-school youth utilizing the basic instrumentation of the SAS. There is a control group in order to assess net impacts. Finally, projects are operating for two complete years in some sites in order to determine learning curve effects.

Youth programs are rarely able to do more than place students in entry jobs on a part-time and summer basis. Cooperative education models may achieve some linkages between work and education, particularly when focused on single occupations, but only in very exceptional cases do in-school work experiences include formalized transition procedures into full-time jobs, much less into career tracks. The Apprentice/School Linkage Project was an attempt to forge such tracks. Juniors in high school were screened for maturity and career interest. For each selected student, individualized placements were developed in apprenticeship positions formally recognized by the Bureau of Apprenticeship and Training. To be registered as an apprenticeship position, a job must include prescribed standards of behavior and competencies for apprentices, as well as spelling out specific training steps and career progressions. This was to serve as the basis of individualized tracking of the youths during the in-school work experience, as well as the basis for coordination with educational offerings. Upon graduation from high school and successful completion of the in-school work experience, the youth then would stay with the same employer, having received apprenticeship credit for the in-school work. Apprentice requirements were clearly articulated so that disadvantaged or other youth could be screened to meet employers' minimal requirements. The apprenticeship training steps could assure that work was a learning experience, and formalization permitted better structuring of educational curricula to match learning on the job. Finally, the arrangement had the potential to create career tracks which could serve subsequent youth so that job development would not have to be a recurring process.

These possible benefits, however, rested on a number of assumptions concerning feasibility and impact: Could apprenticeship positions be identified and created for in-school youth? Would these be accessible to all or only the "cream" of the population? Would subsidies be required to entice employers to participate? Would unions object to these activities? Would participants stay in jobs and continue on after school? Would the designed career entry progressions in fact be followed by the young adults? Would the employers continue to refill the apprenticeships after their initial experience? Could education be better linked with work?

To answer these questions, the Bureau of Apprenticeship and Training, with funding from the Office of Youth Programs, initiated the Apprenticeship/School Linkage Demonstration in eight sites, with a planned variation emphasizing greater targeting on women and minorities in half of the projects. There is a process and impact evaluation, including, in some sites, use of the Standardized Assessment System in order to achieve comparability with the evaluations of other transition efforts.

Jobs for Delaware Graduates represented another approach for delivering school-to-work transition services. In this case, a nonprofit intermediary corporation was created to provide transition services for

high school students expected to have labor market difficulties upon leaving school. The activities included individualized counseling, vocational exploration, job development and placement plus career clubs and other motivational efforts. Staff with special training and a business background in many cases operated in the schools to provide this assistance, dramatically increasing career counseling resources. The impact was assessed for those helped in both the junior and senior years vs. those in the senior year alone. There was a control group of youth not receiving treatment. The SAS measures as well as other evaluation instruments were utilized. The nonprofit intermediary approach and the JDG model are being extended to other states to determine replication feasibility.

The Career Information and Guidance Saturation Demonstration provided extremely intensive career information, counseling and basic life skills training in a selected poverty area high school. Special effort was made to exclude job development, placement or work experience, so that the impacts of the information services alone would be isolated. Both juniors and seniors received such assistance. Their experiences in school and after leaving were to be tracked relative to those from a control site to determine both the in-program gains in career awareness and the impacts on school completion as well as the resulting impacts on labor market transition success.

There were also an array of structured summer demonstration projects to test the effectiveness of summer work and training experiences in inducing return-to-school by students and in easing the transition into the labor market for dropouts and graduates.

During the 1979 and 1980 summers, Recruitment and Training Programs (RTP), provided needs assessment, career exploration, motivational training, consumer education, counseling, placement and follow-up services for high school graduates or recent dropouts using a randomly selected control group to measure changes in attitudes, career awareness, and job knowledge over the course of the summer as well as comparable success in the labor market two-months afterwards. The Human Resources Development Institute (HRDI) of the AFL-CIO provided counseling, supportive services, union orientation and job placement assistance to high school graduates enrolled in the regular summer program to determine if the extra services could make a difference in securing "career" jobs.

The National Urban League (NUL) identified youth in transition who were performing well in their regular summer program jobs. They were given an array of pre-employment services to supplement the work experience, and they were subsequently placed in private sector jobs as well as given worksite follow-up for three months into the fall. There was a control group of youth who did not receive these extra services in order to determine impacts.

Return-to-school impacts were tested in a six-site summer demonstration mounted by SER/Jobs for Progress. A fourth of the 1,000 participants were dropouts, one-half high school students and a fourth high school graduates. These youth received services focused on returning them to school or continuing their education including career counseling and assistance in securing in-school work experience. There was a sample of

youth who did not receive the educational-oriented services. The SAS was utilized in the evaluation. Under the Vocational Education/CETA Summer Youth Program, the Office of Youth Programs transferred funds to the Bureau of Occupational and Adult Education in the Department of Education which, in turn, provided grants to four selected institutions of post-secondary vocational education with an emphasis on minority institutions. They offered a combination of classroom training and work experience to high school seniors, dropouts and first year post-secondary vocational students to motivate them to pursue further vocational education. Funds were also transferred to the Bureau of Higher and Continuing Education for six projects which served Upward Bound participants--disadvantaged youth in their junior and senior years of high school who were exposed to a college setting over the summer in order to encourage their continued education. These youth were provided part-time work and a career-related curriculum. The aim was to determine whether the earnings could improve the attractiveness of the program and the propensity of participants to continue on to college.

Finally, Opportunities Industrialization Centers of America conducted summer career exploration projects for high risk youth in seven different sites. The program emphasized motivational training, career exploration, consumer education, needs assessment, supportive services and work where appropriate in order to determine whether the summer experience could reduce juvenile delinquency and crime and could alter the attitudes, aspirations and awareness of youth with serious problems. There was a randomly assigned control group, pre- and post-tests and three- and eight-month follow-ups to determine outcomes.

All of the previously mentioned demonstrations emphasized various mixes of basic life skills training, pre-employment services and work experience during the school year and/or in the summer. These activities may increase employability and ease the transition into the world-of-work, but a fundamental for success in the labor market is the ability to read and write. A number of demonstrations were, therefore, implemented to test remedial and alternative education approaches. There are a range of alternative schools throughout the country that are addressed to the special needs of dropout youth. These schools usually share some common elements such as higher teacher-pupil ratios, individualized and self-paced instruction, student interaction and mutual support, as well as linkages with the world-of-work and experience-based instruction. As a result, alternative education programs usually involve higher per pupil expenditures. One aim of the knowledge development agenda was, therefore, to determine (1) whether these extra expenditures produce commensurate benefits, (2) the elements of alternative education approaches which have the greatest impact, (3) the types of youth who benefit most, and (4) the ways in which these approaches can be most effectively replicated.

The most carefully tested model of alternative education was the Career Intern Program implemented by Opportunities Industrialization Centers of America in Philadelphia in 1973. The National Institute of Education financed a rigorous control group experiment and evaluation to assess the effectiveness of CIP covering operations during the 1973-1976 period. The evaluation documented substantial benefits for participants relative to controls. As part of the knowldge development efforts under YEDPA, therefore, the Office of Youth Programs financed the replication of CIP in four sites by OIC/A, as well as a comprehensive evaluation by NIE.

After the implementation of these four programs, the experiment was expanded by the addition of an Hispanic adaptation of CIP, operated by SER/Jobs for Progress. Funds were also contributed to a nationwide funding of alternative schools by the Office of Juvenile Justice and Delinquency Prevention of the Law Enforcement Assistance Adminstration. The OYP contribution provided for the employment and world-of-work components of these projects as well as a comprehensive evaluation consistent with that completed for CIP and the Hispanic adaptation.

The experiences of students in these alternative programs were compared with those of a randomly selected control group, a matched comparison group, participants in other youth employment and training activities, and a norm-referenced population. The dimensions of measured participant impact included school attendance and completion rates, reading and arithmetic gains, changes in attitudes and aspirations, as well as subsequent educational and labor market experiences in a follow-up period. This information will help determine the types of youth who benefit most. Process evaluations, combined with impact evaluations, will suggest the elements which work best under different conditions, as well as the feasibility of a planned replication process. The SER-operated project should suggest how and whether the basic model can be adapted to meet the severe educational needs of Hispanic youth. In other words, the result should be refinement and better targeting of alternative education.

The Job Corps is a primary alternative education mechanism. It serves youth who have mostly failed in or been failed by the education system. Seven of eight enrollees have not completed high school. The median achievement level at entry is below the sixth grade level. To overcome these deficiencies, Job Corps provides comprehensive educational offerings. The basic education program consists of a standard set of materials graded for skill level, with a unit system of instruction and progression. There is a low student/teacher ratio to allow individualized attention. When students progress to roughly the eighth grade achievement level, they are usually placed in the General Equivalency Degree program. This, too, is a standardized package of self-paced units. An off-center Advanced Career Training Program in colleges and post-secondary vocational institutions has been instituted to provide for Corpsmembers who have the capability to continue their education. Finally, entrants into Job Corps are provided initial basic life skills and world-of-work instruction which will hopefully guide vocational choice in Job Corps and be of some help to early leavers.

The Educational Improvement Effort (EIE) used the Job Corps centers as an experimental laboratory to carefully test alternative approaches for teaching economically and educationally disadvantaged youth. Cooperatively with the education community, exemplary education approaches outside of Job Corps were assessed for applicability for disadvantaged youth. With some adaptation, the most promising models were then implemented in multiple centers. These included, among other approaches, computer assisted teaching, competency based instruction, the use of paraprofessionals and learning disability treatment. Repeated cohorts of Corpsmembers were randomly assigned to the models and to traditional Job Corps offerings. Their educational gains over a standardized period were measured. A range of process information was gathered about the experiences of participants, as well as of staff who administered the new models. Job Corps program

data will be combined with the process and educational gains tests to assess the impact and effectiveness of the various approaches. The lessons from EIE will extend far beyond Job Corps. The demonstration and research infrastructure which has been put in place permits as close to pure experimental conditions as can be achieved in an operational setting, so that a range of alternative approaches for educating disadvantaged youth can be tested and refined.

CETA touches the lives of 45 percent of black youth and a fourth of Hispanic youth before they reach their twenties. Within this group, there are thousands who could succeed in and benefit from a college or post-secondary education, and thousands among those who will not make it without help despite the availability of a variety of support programs for college students from low-income backgrounds. CETA services such as college preparation, part-time or summer jobs, tuition assistance and even, in some special cases, allowances, might be the most appropriate way to serve these youth, particularly to prepare them for careers. They are allowable, but seldom-used, activities under CETA.

The Career Advancement Voucher Demonstration was implemented to test whether CETA eligible youth could be effectively served by support in a college or post-secondary setting, and whether the voucher was an effective delivery mechanism. The demonstration included a group of youths provided a voucher and another group allowed to attend only selected institutions. In each category, some received counseling and supported services, others did not. All youth will be compared, in terms of in-program and post-program gains, to both a comparison group and a randomly assigned control group to determine their relative success in education and employment.

Clearly, there were a wide range of demonstration activities which addressed different dimensions of the school-to-work transition process. The projects were structured along a service mix and activity continuum to mirror the complete range of possible school-to-work transition options. At one extreme, the Career Information and Guidance Saturation project focused on information and basic skills development alone. The YCD, Vocational Exploration and Jobs for Delaware Graduates demonstrations emphasized pre-employment services although some work was included. The alternative education and EIE demonstrations focused on education and human resource development and their role in transition. At the opposite extreme, Entitlement guaranteed employment but offered other services as well. The summer programs tested variants to the simple work experience approach. The Apprenticeship/School Linkage demonstration emphasized work experience with few enrichments. The Youthwork projects spanned the entire range of the spectrum, exploring more innovative approaches for each service combination.

Each demonstration contained planned variations focused on different subgroups, involving different delivery agents, or employed different service mixes. There were six focus areas in Youthwork projects. YCD national sponsors adopted different emphases within a relatively standard service framework. There were planned variations under the enrichment and wage subsidy experiments implemented as part of Entitlement; sites were consciously selected to get a mix of conditions, and the smaller projects were intended to experiment with program variations. Under EIE, a range of

different models addressed to different educational levels and problems were tested against each other. In CAVD there was a planned variation based on vouchers vs. pre-selection of colleges and high support vs. low support.

Finally, in each demonstration there was an attempt to assess learning curves by examining performance over at least two years, to determine the effectiveness under different conditions in multiple sites, and to compare the effectiveness of alternative delivery agents. The potential knowledge development is, thus, dependent on the degree the analysis captures the effects of planned variations, alternative circumstances, the comparative effectiveness of delivery agents within each demonstration, but also on the degree that the interconnections between demonstrations are made.

Involving Education and Employment Institutions

The involvement and knowledge utilization strategy relative to school-to-work transition activities was extremeley critical because of the multiplicity of institutions and sensitivity interests. YEDPA thrust the Department of Labor into the middle of the educational arena, giving the Department and CETA prime sponsors responsibilities for arranging academic credit for work experience, providing counseling in the schools, and sponsoring alternative education. It urged cooperation with vocational education, career educaton and post-secondary institutions. It required negotiation with local education agencies, coordination through state agencies, and cooperation at the federal level. Each of these responsibilities was fraught with potential conflicts and tensions. CETA is a centrally directed system compared to the schools, so that any dictates from Washington which would be accepted by CETA prime sponsors might run against the grain of governance in the education system. The notion of academic credit for work experience, with its underlying assumption that learning could and should occur outside the classroom, was controversial in some education quarters. There were stresses between local and state education agencies, between vocational, career and academic education and between regular and alternative schools.

There were also a range of players and special interests in the CETA system with an interest in getting a foot in the schools through transition programs. The National Urban League and Opportunities Industrialization Centers had played a role in "street academies" and Hispanic groups had a particular interest in education issues because of the high dropout rates of Hispanic youth. In the early 1960s, the Federal/State Employment Service had personnel assigned full-time or part-time to two-thirds of high schools in the country, so it too, had an interest.

The strategy was to involve all these groups in ways that would educate them to their potentials for involvement in school-to-work programs, position them to play a primary role on a continuing basis if they demonstrated effectiveness, yet to postpone decisions about institutionalization until some experience had been gathered. Research, evaluation and demonstration activities provided the structure for involving the interest groups, keeping their involvmenet balanced, avoiding controversy, defining roles and comparative advantages without making permanent commitments which would have involved immediate and counter-productive debate over shares.

A first major step was to establish a nonprofit intermediary, Youthwork, Inc., as the agent for coordinating incentive grants for in-school programs. There was no established national institution with extensive education and CETA ties which would not be seen as in one camp or the other. Therefore, a nonprofit intermediary was created with foundation support, its Board and staff chosen specifically to promote the intermediary function. Some funding was also provided by the Office of Education under terms of an interagency agreement, and much of the Youthwork staff had an education background. The idea was to provide a neutral pass-through mechanism. Schools and community-based groups and other institutions were allowed to compete for grants, but the applications had to be submitted through prime sponsors in order to help cement local relationships. The degree of coordination was one of the selection standards.

The Youth Career Development demonstration was designed with the specific intent of involving national community-based groups and the Employment Service in the provision of school-to-work transition activities. Since some of the CBOs had not been extensively involved with in-school programs previously, nor in demonstration projects with research requirements, the use of the nationally designed prototype and the Standardized Assessment System helped facilitate their participation. In turn, involvement of national groups drew attention of affiliates to possibilities for local funding. Turf issues were unavoidable. For instance, SER was initially involved in a joint effort with La Raza, another national Hispanic CBO, but separate sponsorship emerged as a result of conflicts. The National Puerto Rican Forum sought to carve out a separate "turf" in dealing with Puerto Rican youth and was subsequently included as a delivery agent. Each argued that it could better serve different subgroups of the Hispanic population. This will, in fact, be tested.

In order to increase involvement of the private sector, the National Alliance of Business and the Human Resource Development Institute of the AFL-CIO were contracted for the multisite experiment with vocational exploration. HRDI also operated the summer transition program. Private Industry Councils and specific employers were involved under a discretionary effort funded through Youthwork to replicate the "Kaiser" program where employers "adopt" schools. The Apprenticeship/School Linkage demonstration was operated through the Bureau of Apprenticeship and Training. In other words, these were very targeted efforts to draw in and draw on the business and labor communities.

The post-secondary institutions were involved under Youthwork but also under a grant competition operated through the Fund for Improvement of Post-Secondary Education (FIPSE). Another set of grants were provided to the Bureau of Adult and Occupational Education for vocational education/CETA linkage models utilizing post-secondary institutions. The National Association of State Boards of Education examined barriers to cooperation between CETA and the education systems. The American Vocational Association was funded to identify model programs and to provide technical assistance to the vocational education system. The National Center for Vocational Education was selected as the broker for training, working closely with the American Vocational Association. The Council of Great City Schools was commissioned to undertake an evaluation of CETA/school ne
component of the overall knowledge development effort was improvement in

programs in the large cities. The National Governors' Association and a consortium of state level education groups were funded to provide technical assistance to states on CETA/education linkages. The Upward Bound program was supplemented to determine the impact of a summer work component. Minority colleges were also heavily involved in the new Advanced Career Training component added to Job Corps on a demonstration basis. A state consortium of education agencies was specifically structured as a technical assistance, full-service broker. Youthwork was contracted to serve as a "full-service" broker for local technical assistance in improving education activities. Finally, there was a demonstration testing the effectiveness of Education and Work Councils in achieving "collaboration" between institutions involved in the transition process locally. A set of councils was established in 1976 with seed money provided by the Department of Labor through three intermediary units--the National Manpower Institute, the American Association of Community and Junior Colleges and the National Alliance of Business. Thirty-three councils were eventually established after careful review of sites in order to determine the most fertile local conditions. Under YEDPA, federal support was continued on a gradually phased-out basis for a second and third year of operation. Through an interagency agreement, the National Institute of Education sponsored a major evaluation of the councils and their effectiveness. In other words, all levels and major elements in the education community were involved.

All of these involvement efforts were undertaken with a longer-term view in mind. First, by getting the involvement of national organizations, helping them to identify positive roles and model approaches, and using their communication and governance systems to spread the word on these approaches, information could be disseminated broadly and effectively. For instance, affiliates learning of the nationally-supported projects of the CBOs could then compete for local funding. Second, demonstration efforts such as Entitlement, the Career Intern Program and its Hispanic variant, Jobs for Delaware Graduates, the YCD approaches, and the Vocational Exploration Program were all structured so that if successful, the current sponsors could be used as the replication agents under the planned incentive grant approach. In the case of FIPSE, Upward Bound, the Bureau of Apprenticeship and Training under the Apprenticeship/School Program, as well as the Women's Bureau and the Employment Service under YCD, the assistance could be provided directly from federal level agencies chosen as sponsors.

There were immediate applications and impacts from knowledge development activities as well as these planned longer-term payoffs. Through the Vice President's Task Force on Youth Employment, a series of roundtable discussions were held throughout the country to solicit the views of educators and employers. A major natonal conference was held under the auspices of the Task Force focusing on workplaces and classrooms. The individuals and institutions involved in these deliberations, the substantive models and options which were highlighted, and the formulated issues which were discussed, were all products of the involvement strategy. The positive interaction and relatively harmonious development of legislative recommendations from the education and CETA communities was largely a result of mutual understanding and a track record of involvement.

There are other examples of immediate impacts. For instance, one aim of the overall knowledge development effort was to improve the summer

program. Discretionary funds had traditionally been distributed to large city prime sponsors, exacerbating their management problems. Under the summer knowledge development effort, the funds were distributed to national community-based groups, education, business and minority organizations for demonstration projects, increasing the base of support for the summer program, experimenting with alternative approaches while reducing the administrative burdens on large prime sponsors. Monitoring on a massive scale was funded as a knowledge development activity. It generated knowledge but was the impetus for increased attention to the quality of the summer program. In the first year of the youth initiatives, summer regulations were redrafted to stress the development of "model" components such as vocational exploration. Early evaluation results indicated basic management problems in administering even simple summer programs, and the findings for the VEPS summer component did not document substantive in-program gains for participants relative to those in regular summer programs. As a consequence, the regulations were rewritten to return to the basics in the summer program until management could be improved and the effectiveness of the VEPS model demonstrated. Another example of application was in Job Corps, where a revamping of the entire reading program was initiated as a central part of the Educational Improvement Effort. A number of different Advanced Career Training activities in post-secondary institutions were implemented on a demonstration basis but these also represented a significant segment of Job Corps expansion (Job Corps was doubled as part of the youth initiatives) which could be achieved more rapidly than center expansion. The Exemplary In-School Grants and the Entitlement selection procedures were designed specifically to promote cooperation between the local education agencies and prime sponsors and to draw their attention to substantive aspects of cooperative programming. More than half of prime sponsors submitted applications, all of which required some cooperation and discussion between the schools and prime sponsor. In other words, a specific aim and outcome was to have a spillover effect on local CETA in-school efforts. Thus, there have already been very definite and observable changes in youth programming and policies as a result of knowledge development activities and the involvement strategy.

The Information Yield

All this is a description of the knowledge development process rather than its findings. One reason is that only a small portion of the potential yield from knowledge development activities is yet available. A Knowledge Development Plan for Youth Initiatives, Fiscal 1979, outlined the timeframes for the availability of information, stressing the necessary lags between the initiation of demonstration activities and useable knowledge. It realistically projected that most substantive information on impacts as opposed to processes would not be available before the Spring of 1980 at the earliest. For instance, the YCD was one for the first demonstration projects to get underway and was placed in operation for most sponsors during the 1978-1979 school year. The three-month follow-up of the first group of graduating seniors was in September and October of 1979 with the eight-month follow-up occurring in February and March 1980. The three-month follow-up results were collected, cleansed and entered into computers for analyses by the beginning of calendar 1980. A preliminary analysis report was prepared in the Spring of 1980. After revision it was

immediately sent to the Government Printing Office and published two months later. The eight-month follow-up analysis will be completed in early 1981 with printing and distribution probably three months subsequently. Yet these results relate only to the start-up experience and to youth who received just one year (or less in most cases because of start-up delays) of experience. It will be another year before the effectiveness of school-to-work transition activities can be realistically assessed.

The yield on research and evaluation efforts has been somewhat more rapid and extensive than expected in the 1979 Knowledge Development Plan, but the demonstration results have lagged. Not surprisingly, few reports were submitted ahead of schedule. Basically, however, the timing of knowledge development results and the pace of their subsequent dissemination could not be accelerated. In other words, the payoff from knowledge development will not become widely recognized until 1981 and 1982, with widespread application even later.

Despite these time constraints, the volume of information already available is quite formidable; even though largely focused on process issues, reviews of previous activities and literature, analyses of existing data sets and presentation of very preliminary demonstration findings:

First, the literature concerning school-to-work transition activities has been extensively evaluated. Summaries of past lessons and the state-of-the-art are contained in the following published Youth Knowledge Development Reports:

2.2 Employment and Training Programs for Youth--What Works Best for Whom?

2.3 Between Two Worlds--Youth Transition From School to Work

2.4 A Review of Youth Employment Problems, Programs and Policies

2.5 School-to-Work Transition: Reviews and Syntheses of the Literature

Second, there is extensive evaluation of the new youth programs and particular attention to the education-CETA connection, as well as to related efforts such as cooperative education:

3.13 Initial Youth Employment and Demonstration Projects Act Experience at the Local Level

3.14 The Unfolding Youth Initiatives

3.15 The Local Focus on Youth

3.16 Youth and the Local Employment Agenda

3.18 Youth Initiatives--The Early Experience

3.19 Lessons From Experience: An Interim Review of the Youth Employment and Demonstration Projects Act

2.14 The Transition From School-to-Work--The Contribution of Cooperative Education Programs at the Secondary Level

Third, the statistical base concerning the school-to-work transition process has been dramatically expanded. The results of the first new National Longitudinal Survey provide important information on educational patterns of all youth which can be compared with those in earlier surveys, and particularly the transition patterns for Hispanic youth, where valid information is available for the first time. The report on the baseline survey of Entitlement and control sites provides the best picture yet of the school and work experience of disadvantaged youth. The second NLS and Entitlement baseline reports will be available in the near future. The tabulations from the Survey of Income and Education yield some useful detail about employment and school attendance patterns as related to race and income, again providing some important data on Hispanic youth. The available information is provided in the following Youth Knowledge Development Reports:

2.7 Findings of the National Longitudinal Survey of Young Americans, 1979

2.13 Schooling and Work Among Youths From Low-Income Families

2.16 The Labor Market Experience of 14-21 Year-Olds

10.2 A Profile of Hispanic Youth

Further, there is a volume of literature on governance issues, coordination and cooperation between the CETA and education systems, and viewpoints of the different interest groups. This is gathered together in Youth Knowledge Development Reports 12.2-3, Linkages Between the Education and Employment and Training Systems. The interim findings on the effectiveness of work-education councils as a bridging mechanism are presented in Report 12.5, Work-Education Councils--The Collaborative Approach. Report 2.16, Education and Employer Perspectives, synthesizes the views of the businessmen and educators.

Fifth, there are a number of program models identified by various public interest groups as part of the involvement strategy, as well as through the developmental effort of Youthwork. Likewse, there are studies of the implementation, institutional change and replication processes. These are contained in Report 8.7, Program Models and Innovations, Report 6.5, School-to-Work Transition Services--The Exemplary In-School Project Demonstration and Report 8.6, Improving the Implementation of YEDPA Programs.

Sixth, there are significant findings from Entitlement on its feasibility, cost and uptake rates, as well as some preliminary estimates of retention and dropout return effects and assessments of the quality of work. Early impact findings are also available on the in-program and post-program gains of 1978-1979 school year seniors in the YCD, educational gains of the first cohort in the Educational Improvement Effort, gains for the summer only component of the Vocational Exploration Demonstration Program and the early experience of youth under the Career Advancement Voucher Demonstration. These are available in the following Youth Knowledge Development Reports:

5.1 Alternative Education Models--Interim Findings From the Replication of the Career Intern Program

5.2 Alternative Education Models--Preliminary Findings of the Job Corps Educational Improvement Effort

5.3 Advanced Education and Training--Interim Report on the Career Advancement Voucher Demonstration

6.1 Vocational Exploration--Interim Findings and Background

6.2 School-to-Work Transition Services--The Initial Findings of the Youth Career Development Program

11.1 Entitlement Implementation: The First Year's Experience

11.2 Entitlement Implementation: Two Year's Experience

11.3 Preliminary Findings on the Quality of Work and Impacts on School Attendance Under Entitlement

Additionally, and of great significance, findings covering the impacts of the 1979 summer program on return-to-school rates, as well as the effects of Entitlement on school retention and return from the second baseline survey, are available in preliminary form and will soon be ready for publication.

These are the tangible, written products of the research, evaluation and demonstration efforts relating to school-to-work transition issues. But there are other less visible or measureable examples of the development of knowledge. This is best illustrated by the work of the Vice President's Task Force on Youth Unemployment. During its deliberations, some 1,200 persons participated in five different conferences, and several hundred more participated in roundtable discussions or deliberative sessions. The summary report was disseminated to over 25,000 individuals. There were several score of major articles about the findings. In other words, the spread of knowledge was extremely broad. It is no mean feat to develop and introduce major legislation that has general acceptance on both the education and labor sides as well as from most major groups. This consensus was not a reflection of their ignorance, but rather the reflection of fruitful discussion and negotiation over an extended period. Most of the involvement activities had spillovers such as discussions of youth programs, problems and issues at national lcoal conferences of national organizations. Tens of thousands of individuals were reached by these conferences, seminars and meetings.

Likewise, there has been an accumulation of institutional knowledge. The involvement of such a broad spectrum of persons and groups in the research, evaluation and demonstration activities has built up staff expertise on the youth issues. Coalitions have been formed, for instance, of the leadership of the Hispanic groups involved in youth programs and of all community-based organizations serving youth. Voluntary youth serving agencies such as Boy Scouts and 4-H which had not previously been involved in CETA are actively participating and have acquired new knowledge. The

apprenticeship system, the vocation education system, and the Employment Service are better aware of the problems of disadvantaged youth and the roles the institutions can play. Special purpose nonprofit intermediaries such as Youthwork and CPPV have accumulated wisdom about how to deal with specific sets of problems. In other words, available knowledge concerning school-to-work transition and other youth problems has been broadly disseminated and thousands of individuals have acquired increased expertise as a result of involvement in knowledge development activities.

TRANSLATING INFORMATION INTO KNOWLEDGE AND POLICY

The Challenge

Yet we have still only tapped the surface of what is potentially available from knowledge development activities. There is no doubt that the scores of reports already published as well as hundreds that will follow, offer exciting opportunities to improve the quality of youth programs and policies as well as understanding of the underlying problems. The real issue is how to make the most of these opportunities, fully utilizing the accumulating information without being overwhelmed by it. T.S. Elliot's phrase perhaps best captures the danger which is implicit in such an ambitious undertaking--"Where is the wisdom we have lost in knowledge, where is the knowledge we have lost in information?"

There are several possible negative reactions to what is a truly staggering mass of information. One is to disown the significance of the new information, particularly when most of it will simply confirm and rarely will it refute the basic elements of what is already known. It is the detail of the findings that can help fine-tune thinking. Yet detailed information means increased complexity and equivocation--many "yes...but" responses to questions. The temptation is to believe that conditional answers are inherently less valid than straightforward and simple answers.

In most cases, information will reduce the range of uncertainty but not convincingly resolve issues. There are usually multiple factual considerations in a normative balance. Greater knowledge may shift the balance, but will not close out the debate.

There will always be a desire for rigorous, typically quantitative, findings to resolve issues, and there is likely to be more debate over the rigor of methodology than the findings themselves. Yet little information will be "scientifically" pure, and judgement is required even in the synthesis of "hard" information. It is easy to get lost in the manipulation and translation of judgemental knowledge.

Some human and institutional phenomena are inherently difficult to measure. Any measurements adopted will be subject to error and debate. It is important to recognize the limitations of measurement tools while still drawing from them the inferences that are possible.

Finally, decisions usually depend not on the facts but on the judgemental standards. The contexts for resolving issues, the questions that

are asked and the burdens of proof for answering them, are keys in translating information into knowledge, and applying this to policy and practice.

These issues are manifest in the interpretation and application of some of the information which is already available on the school-to-work transition problem and the deluge which is on its way. The following analyses briefly illustrate the issues which must be faced, and how they can be successfully addressed, in translating information into useable knowledge and applying it to policy.

Confirming Conventional Wisdoms

A basic question is the utility of all this information for the practitioner or the local prime sponsor manager of youth employment and training programs--does "knowledge development" hold any promise of making things easier or more effective by providing practical guidance? As the previous discussion has mentioned, there has been a heavy emphasis on exploring the practical and applied dimensions of youth programs. The Standardized Assessment System's Project Information Questionnaire picks up very detailed information on implementation processes, stability and change, staffing, linkages, costs and service mix for demonstration projects. How-to-do-it guides are deliverables under most of the demonstrations. For school-to-work transition activities, there are thousands of pages of monitoring reports looking at project implementation processes. Ethnographic studies have been completed covering the implementation and stabilization of Youthwork projects. For the summer porgram and Entitlement, there has been unparalleled monitoring of worksite quality. There have been careful tests and studies of replication processes. The aim of all these efforts was to gather and present operationally useful information.

The yield from such operational or applied knowledge development is not so much limited by quality or quantity--because there will be more and better information on this subject than has ever been available--but rather by the fundamental constraints in the use of this type of information.

An example is the research, evaluation and demonstration activity which has addressed the issue of worksite quality--an issue of obvious importance since nine of ten youth in employment and training programs receive publicly subsidized work experience. YEDPA wanted more "meaningful" youth jobs than those provided in previous programs but failed to define what "meaningful" meant. As a minimum, jobs were to be structured, productive and well supervised, demanding a "day's work for a day's pay" according to the initial Charter for youth programs generated by the Department of Labor, but there was no system for measuring productivity and no guidance how to select and maintain a good job. At the same time, there was a more immediate and basic problem in the summer program where critics charged that the nation could no longer tolerate "fun and games" or simply "keeping the kids off the streets." What information is available from knowledge development activities on work quality and how can it be used in a practical way to help resolve such issues?

Under the Entitlement program, which had to create thousands of public sector jobs for youth in some cities but also had a large proportion of private sector jobs because of the unique mandate for 100 percent wage subsidies, there was a great deal of attention to worksite quality issues. In an extremely sophisticated quantitative analysis of job quality, independent observers, supervisors and youth participants rated worksites on a standardized set of dimensions. The qualities of "good" jobs, and the explanative factors, were summarized as follows:

> "Assessors placed the greatest weight on the skill and enrichment content of the job, its capacity to keep youths busy, satisfaction of the youths with their jobs, and the work sponsor's judgement that the work was valuable. Work sponsors and youths also placed great store in the youths being kept busy, and the content and frequency of interaction between supervisors and youths. Youths also tended to favor jobs in the private sector and being held to performance standards, particularly the same standards as regular agency employees. Work sponsors also placed weight on the presence of standards, as well as on youths' satisfaction with the job assignment. In the judgement of all these groups, high ratios of youths to supervisors tended to lower the quality of the jobs. Both youths and independent assessors tended to give lower scores to worksites where work was simple, repetitious and primarily physical labor."

> "... Worksite characteristics were separated into 'standard' characteristics of the job assignment such as job skill content, supervisor background, ratio of participants to supervisors and 'process' decisions such as supervisor-youth interactions and the degree to which youth were kept busy. Analysis of the interaction among these characteristics tends to support the plausible judgement that initial job characteristics set the framework for the work process that follows. This suggests the importance for prime sponsors to emphasize the initial screening of jobs, work sponsors and youth assignment levels, rather than to rely upon later worksite adjustment to correct deficiencies."

During the 1979 summer program, over 7,500 worksite monitoring visits were conducted by the Regional Offices of the Department of Labor. The Office of the Inspector General monitored another 2,230 in a stratified sample of prime sponsors. Over 1,200 worksite visits were conducted by the Office of Youth Programs in large cities where problems were expected. The findings statistically documented the conclusion that: "Large worksites in large urban areas with low supervisor to youth ratios and inadequate worksite agreements which do not specify assignments, had the most serious problems. Recreation worksites and those involved in arts and crafts activities have the most frequent problems..."

A more judgemental analysis of YEDPA worksites in a stratified sample of prime sponsors noted the importance of supervisors as the key to worksite quality:

> "No single factor appears to account for the difference between a program perceived by all as being useful and one that is seen as

> not. Perhaps the quality of supervisor is the single most important factor...The key factors seem to be that the jobs or work experience must be real (as opposed to makework), the supervisors have to be able to relate to youth and teach them, and the youth have to perceive what they are doing as useful for their futures. Usually, we found, when the first two factors were present, the third was also."

Finally, steps were taken to provide prime sponsors with the specific materials needed to improve their programs. Model work projects were identifed and described by the hundreds. Standardized worksite agreements, standardized monitoring instruments, participant orientation manuals, and supervisor training materials were all prepared and distributed to the system. These were all based on case study evidence, monitoring findings, and lengthy efforts to identify model sites.

Are such findings and products of any practical use? They largely confirm what should be self-evident to everyone: good worksites should have real work, should be matched to the interests of participants, and should have adequate levels and quality of supervison. To achieve this end, more careful review and screening of sponsors and jobs, training and selection of supervisors, as well as monitoring and timely corrective action, are all needed. Standardized worksite agreements and monitoring instruments are mechanisms to achieve this end. There are alternatives to typical parks and recreation assignments as exemplified by the program models, but anyone with imagination locally could think up their own alternatives.

Yet is more precision possible? Are there, in fact, less obvious keys to successful worksites locally or policy measures which could be taken nationally to improve quality overall? Some examples suggest there are not. For instance, because large cities have less effective programs on average, does this mean that large cities are unmanageable and should be cut back? This is difficult to argue when the incidence of serious worksite activity problems in the large city sample of the special monitoring effort ranged from 11 percent in San Francisco to 32 percent in Washington, D.C. It is important to note, also, that the incidence of inadequate worksites in the large city Entitlement sites was no higher than the Inspector General's findings for the nation as a whole even though these cities had summer programs several times larger than other big cities. High intensity or large-scale operations do not preordain an intolerably high incidence of poor worksites. Program problems are more frequent in large prime sponsors, but these are also the areas that have the most severe problems. If funds were reduced in the cities, this would mean closing some worthwhile programs and certainly many very worthwhile sites serving the most needy youth. To confound the issue, there are no hard-and-fast connections between design and management effectiveness and operational effectiveness. Some large cities with poor worksite agreements had a low incidence of problems, while other prime sponsors that followed procedures to the letter had very high percentages of inadequate sites. There was evidence of substantial improvements from the 1978 to 1979 summer in the city of Newark, but this city did not noticeably reduce its large worksites or improve worksite agreements.

Should supervisor to youth ratios be modified? In the Regional Office worksite sample, serious supervisory problems such as lack of work, lack of skills instruction, too much slack time and uneven assignments were ten times more likely on sites with nine or more participants per supervisor than on those with four or less. Yet 85 percent of worksites with nine or more participants were adequate! Likewise, large worksites are not necessarily bad worksites even though they are less likely to be adequate. The incidence of either insufficient work, inadequate equipment, unsafe and unsanitary conditions or nonallowable activities, was four times higher on sites with 13 or more participants than on those with five or fewer; yet 93 percent of the large worksites were without serious problems in this regard, and these large sites accounted for three-fifths of all participants in the summer program. The Entitlement survey did not find significant differences in the incidence of inadequate worksite activity between private, nonprofit or public sector sites. Likewise, a "model" project may work in one setting but not in another. The effort to operate a model project may exceed the effort needed to make a traditional project work better. Single participant placements may be best, but it is much more feasible to initiate and maintain a multiple-participant site. Few large prime sponsors could ever dream of arranging single participant placements for their tens of thousands of summer enrollees. In other words, there are no firm grounds for excluding specific types of worksites or requiring other types; there can only be guidance about varying possibilities and what is known about the "batting averages" of the alternatives. Thus, it would be unrealistic to arbitrarily limit worksite size, but certainly more care should be taken in selecting and monitoring the large sites.

If findings merely support the obvious and provide guidance only about general trends rather than specific actions, are they unimportant? There has been substantial, quantitatively and objectively documented improvement in the Summer Youth Employment Program. The Inspector General's survey found that only 5 percent of worksites nationwide did not have adequate work, 2 percent had too many participants, and 5 percent inadequate supervisors. The year previously, the General Accounting Office had projected that half the worksites nationwide had one or more of such serious problems. The turnaround may not have been as abrupt as this would suggest, but no one doubts that there was substantial improvement. A major reason was that the formalized monitoring which provided the statistical information analyzed above was, itself, an expression of the seriousness of concern. It may have highlighted the obvious, but it also made prime sponsors and project sponsors pay attention. The high incidence of problems with large worksites and in large cities had been claimed for years by General Accounting Office evaluations, but "knowledge development" meant that the Department of Labor funded or conducted the monitoring itself and was forced to see the problems which it had previously chosen to ignore. In other words, the conventional wisdoms about worksite quality were legitimized and more widely disseminated in a way that could be understood by the delivery system. The process of knowledge development was, itself, an immediate application with significant results.

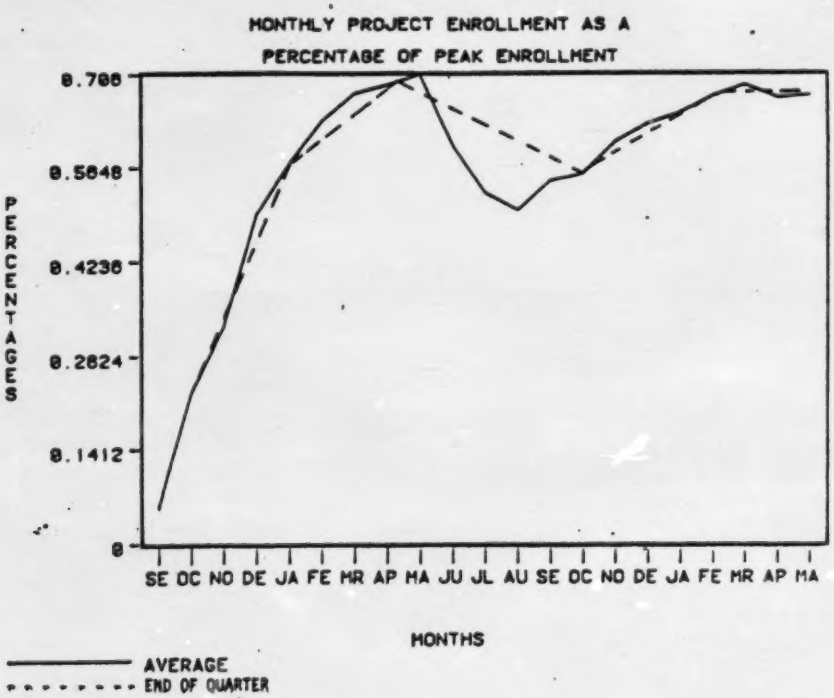
In this case, the knowledge was disseminated through the system by being linked to enforcement from the top down. In other cases, the problem is the reverse, i.e., getting practical information from the bottom up,

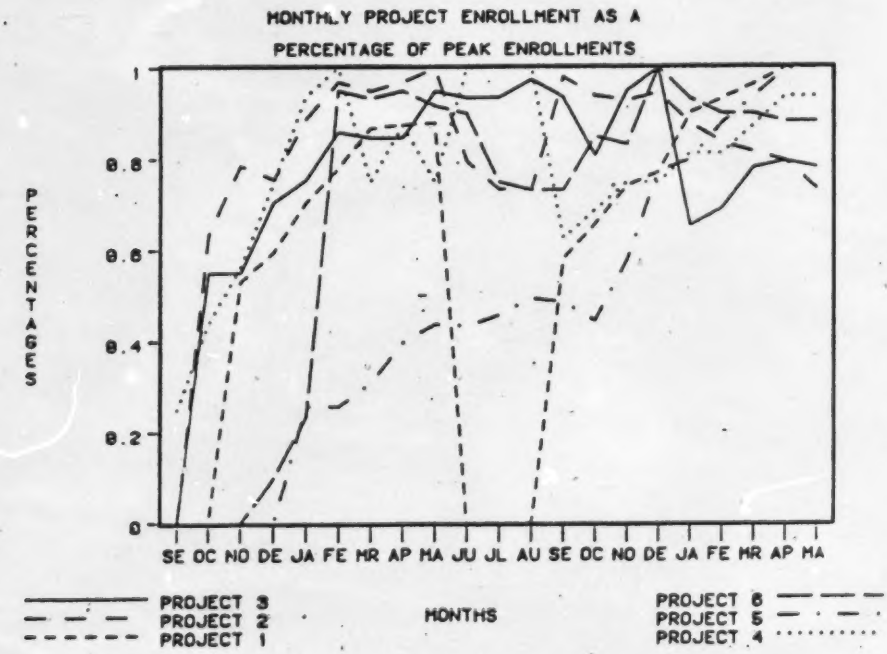
presenting and leveraging what is known at the operational level so that it is intergrated into national policies. One example concerns project stability and staffing. There is general recognition that late or uncertain funding each year complicates CETA operations, that the lack of professional career tracks and the uncertainty of funding creates problems with staff turnover, and that not much is done in the way of technical assistance to improve the content of programming or the technical skills of delivery staff. Those at the delivery level are keenly aware of the damaging effects of instability and of the failure to invest in capacity building. They complain bitterly to anyone who will listen, usually focusing on whatever problem is most immediate. Yet each step up the chain of command this reality becomes more distant, other considerations gain greater weight, and the babel of complaints about different "small" issues are more easily dismissed. At the national level, where decisions are ultimately made which determine funding stability or allocations to technical assistance and overhead, the operational implications are not readily apparent or documented. When an idea such as multi-year funding is considered, the negative delivery level impacts are not given proper weight because there is no "rigorous" proof of their incidence or consequences. It is understandable that legislators and administrators would not want to appear to bloat budgets in any year by forward funding, and would not do so unless there were compelling evidence of the ramifications, which there is not, at least in a quantitative form they cannot discount. Likewise, when decisions are made on discretionary funds--whether to meet political pressures and to support new policy directions which assure credit for administrators, or to spend on pedestrian technical assistance--the latter needs are given a low priority to the extent the deficiencies and turnover of local staffs are not documented. Thus, although it may be accepted that CETA staffs are not well trained and that uncertain funding causes problems, the obvious corrective actions are not taken because the evidence is not documented and leveraged in a way to overcome the opposition to these actions.

An example concerning school-to-work transition projects illustrates this point. Instability is an unfortunate but ever present feature of life at the delivery level, yet it is a feature which is largely invisible in aggregated statistics. CETA nationwide participation levels vary somewhat from year to year and from quarter to quarter, as do expenditures and unit costs; but variations between prime sponsors tend to average out. For instance, summer surges in youth projects in some areas are balanced by the terminations of in-school components in others and vice versa. For prime sponsors, the averaging of enrollments and costs for different projects also tends to mitigate the fluctuations which are occurring; for instance, overenrolling projects are balanced by underenrollers, while unused funds may be shifted from one project to another. At the project or activity delivery level, however, "fits and starts" are a way of life. The greater the detail and disaggregation of information, the more obvious this becomes. But detailed and disaggregated information have not been available in the past, so that policymakers at all levels were not faced with the consequences of their actions.

One result from the process studies which are part of the knowledge development effort is better measurement of such issues and their consequences. The Standardized Assessment System gathers detailed information

for each of the demonstration projects. A compelling visual example of operational level instability is provided for the first time by these data. The first of the following graphs presents the aggregated enrollments in Youthwork and Youth Career Development school-to-work transition projects. This is the reality as seen at the national level--a picture of steady phase-up, a drop associated with the end of the school year, and then maintenance of enrollment over the second year. The next graph presents the underlying reality for six of the projects typical of the larger sample.





There are incredible fluctuations from month-to-month, with the patterns significantly different for each project, reflecting unique circumstances, problems and accomplishments. A few basic facts concerning the YCD and Youthwork projects bring these diverse patterns into focus:

- During the 1978-1979 school year, when orderly implementation was intended consistent with school schedules and when funding dates were not that much different from local prime sponsor funding timetables, 85 percent of projects had their first enrollments in November or later and a fourth not until January or later. This suggests the difficulty with new program implementation at the local level.

- Over a third of the projects took a half year or more to reach 75 percent of planned enrollment. Only a third ever reached their planned maximum enrollment, and a third did not reach half of their planned maximum.

- During the 1979 school year (September through May) projects had <u>average</u> enrollments less than half of <u>actual</u> peak enrollments.

- Over three-fifths of projects experienced significant modifications within their two school years of operation.

- Half the projects had at least one change of directors, and one in ten had three directors or more. The annual staff turnover rate averaged 50 percent.

Most people would agree that instability, implementation delays and staff turnover would have negative consequences for the effectiveness of programs, but without estimates of the <u>magnitudes</u> of the problems or their consequences, they have not been given the attention they deserve. The SAS data for demonstration projects permits estimates of these magnitudes. For instance, the mean cost per treatment hour of school-to-work transition projects reaching their enrollment targets was three-tenths the mean for projects which attained less than half of planned enrollment. Projects with low annual costs per person year (less than $2,500) had an average enrollment 73 percent of peak enrollment in the school year, while projects with high annual cost (over $2,500) averaged only 67 percent of peak enrollment in the school year. Participants in stable projects (those with average enrollment 75 percent or more of peak enrollment) gained more on in-program tests of employability skills and attitudes and were better off in terms of education and employment status at follow-up than participants in unstable projects (those with average enrollment half or less of peak enrollment). When the full data are available shortly for a broad-range of school-to-work transition projects, there will be large enough samples to statistically explain relations between different project features and outcomes so that the effect of instability, implementation delays and staff turnover can be more precisely identified.

By quantifying delivery level realities, the Standardized Assessment System will, thus, bring into focus and leverage on policymakers at the national level what is known by everyone at the delivery level. The new information confirms conventional wisdoms, but it may lead to better deci-

sions about issues such as forward funding or increased investment in technical assistance.

Insight Through Equivocation

A first issue in addressing any problem is to identify its scale and severity. Given the vastness of the statistical information available about youth from the Census, the Current Population Survey, the Survey of Income and Education and the various national longitudinal surveys, it is surprising to some that there is no agreement on the universe of need for school-to-work transition services or other youth employment interventions. This issue has been more debated and analyzed than any other. There are an almost limiteless array of needs estimates, with program advociates finding large unfilled needs, while the critics often choose to define away problems. There are unresolved debates about the definition, measurement and meaning of need.

This does not reflect ignorance as much as reasonable difference of opinion about how to define school-age youth employment problems. The basic standard may be education; some say that only dropouts or potential dropouts have "real" problems. The definition may focus on employment status at a point in time or employment experience over an extended period. Alternatively, it may be based on some measure of employability or competencies. Each of these dimensions supports a continuous range in levels of severity, so that alternative standards are arguable within each dimension. For instance, some of the universe of need possibilities based on employment and related statistics include the following:

	Number 16-19-Year-Olds (000)
Unemployed March 1978	
Nonwhite	1,590
Hispanic	392
Poor Unemployed	406
Nonwhite	170
Hispanic	36
Unemployed Dropouts	329
Poor Unemployed Dropouts	160
Nonwhite	64
Hispanic	19
Unemployed 15 or more weeks in 1977	
Unemployed	1,032
Nonwhite	207
Hispanic	78
Poor Unemployed	269
Nonwhite	94
Hispanic	26
Unemployed Dropouts	333
Poor Unemployed Dropouts	175
Nonwhite	36
Hispanic	11

The variants could, of course, be multipled by counting 14- and 15-year-olds, or 16-21-year-olds, or 16-24-year-olds. But other techniques utilizing employment statistics might be used to define need. For instance, considering the large number of youth who do not look for work because they believe none is available even though they want jobs, the employment/population ratio may be a better indicator of status than the unemployment rate. Need may be defined as the shortfall of one group relative to another in terms of employment probabilities. The following equates the school and summer employment/population ratios of low income students with those for the more affluent. The estimates are made using three different low income levels: the Bureau of Labor Statistics lower living standard; 85 percent of this standard and 70 percent (which is roughly the poverty threshold). These estimates are as follows:

	70 Percent		85 Percent		100 Percent	
	In-School (000)	Summer (000)	In-School (000)	Summer (000)	In-School (000)	Summer (000)
14-15	78	44	91	17	116	0
16-17	358	450	373	495	408	536
18-19	201	417	212	472	250	468
20-21	155	317	153	375	85	375
Total	792	1,278	829	1,359	859	1,379

A more relevant perspective for transition programs may be the number of youth who lack coping skills, world-of-work awareness, or previous work experience as opposed to current jobs. For instance, the National Longitudinal Survey measured world-of-work knowledge by a short battery of questions, and scores on these questions were found to be significantly correlated with future earnings, all else being equal. Using these questions and the 1979 NLS data, two estimates of need are derived for illustration. The higher estimate includes all youth with below average scores who have not worked ever for two or more weeks. The more restrictive definition counts only those with limited labor market awareness and experience who are also from low-income families.

Number of Youth Lacking Work Experience and World-of-Work Knowledge

	Low Estimate (000)	High Estimate (000)
14-15	396	2,270
16-17	227	1,044
18-19	109	311
20-21	42	111
Total	774	3,736

Whatever dimension of need is measured or standard applied relative to this dimension, further complications arise in simply counting youth rela-

tive to these definitions. It has been documented that employment status responses differ significantly when the head of household is interviewed (as in the official statistics generated by the Current Population Survey) and when the youth is asked directly (as in the National Longitudinal Survey). Since job search and desire reflect attitudes and behaviors which might not be known by the head of the household, there are reasonable arguments in favor of the direct interview. The differential is particularly significant for students. The NLS labor force participation rate (i.e., the percentage looking for or holding jobs) for students was 53 percent, compared to 37 percent in the CPS; the unemployment rate was 30 percent rather than 19 percent. The unemployment rate differentials between black and white students were significantly greater according to the NLS than the CPS. In other words, this would suggest that there are substantially more in-school youth looking for work but not finding it than counted by official statstics.

Some would argue that these unemployed youth could find jobs if they really wanted to, while others argue that many are too discouraged at the prospects to even look. In other words, many believe that need is not measured by the numbers. The best way to find out is to offer youth jobs and see whether they are willing to take them. Youth Incentive Entitlement Pilot Projects did just that, guaranteeing part-time school year and full-time summer jobs to all poor youth in-school or willing to return to school. What does this tell us about the job desires of youth? Between the March 1978 start-up of Entitlement in selected sites and December 1978, 46 percent of all in-school poor youth who were eligible had enrolled in the program. In March 1978, only 13 percent of poor, 16-19 year-old students were counted by official national statistics as unemployed even though the differential between the employment/population ratio of poor and nonpoor youth was 30 percent. In Entitlement sites, the percentage of eligible youth who had held <u>any</u> job in the year before Entitlement start-up was <u>less than</u> the percentage who subsequently worked in the Entitlement program alone. In other words, when jobs are offered, many youth not counted officially as unemployed will take them.

Clearly, there is not a simple and precise way to measure universe of need. Different definitions are appropriate for different purposes. Considering the need for remedial education efforts, the diploma gap figures are most appropriate. For income targeted work programs for students, probably most appropriate are standards which would equalize employment/population rates. For transition services, some basic skills measure is more appropriate. The uncertainties of the employment and unemployment sampling approaches and definitions, as well as the existence of disguised unemployment, must be recognized and factored into estimations. Those making judgements must understand the implications of alternative definitions, as well as the characteristics of youth who are represented in the alternative counts. Measurement of the universe is to a large extent a normative not a statistical issue, and there is room for debate on statistical issues even after normative judgements have been made. In other words, statistics cannot substitute for judgement and it takes judgement to understand the numbers. The knowledge development activities--particularly the work of the Vice President's Task Force on Youth Employment--have helped to refine universe estimates and to lay out alternatives and the tradeoffs, but they have not, and cannot, resolve all debate or simplify the answers on the universe of need questions.

Partial Answers

Definitive answers for complex policy and programatic issues are rare. Perhaps the most frequently asked and least convincingly answered question concerns the causes of black youth unemployment, particularly the reasons for its increasing severity relative to white youth problems. The litany of possible causes is familiar as well as confounding to the public and policymakers who want to know the cause and the solution:

1. Black youth lag in educational ability, skills, and work experience and therefore are less attractive to employers.

2. Black youth lag in information about jobs and lack peer and parental networks because of split homes, more frequently unemployed parents and siblings.

3. Black youth are concentrated in central cities and rural poverty areas with severe job deficits. They are less likely to have personal transportation to work, while public transportation to suburban labor markets is inadequate.

4. There may be a crowding effect in the labor markets where black youth compete with undocumented workers and sometimes their own parents for entry level jobs. The minimum wage may also price them out of the market.

5. Black youth put greater emphasis on education rather than work, or may have negative attitudes or unrealistic wage or job expectations. They more frequently are trapped in a culture of poverty that provides income alternatives and downplays the value of work.

6. Black youth are more likely to have children out of wedlock and to be involved in the welfare system which creates disincentives to work. They also more frequently have criminal records or are involved in crime.

7. Black youth are less likely to stay with particular jobs or employers which might reflect their greater concentration in the secondary labor market, greater income alternatives, discrimination or negative attitudies toward work.

8. Employers discriminate against black youth, either actively or by ascribing to each the average deficits of all black youth without providing an opportunity to demonstrate individual merit.

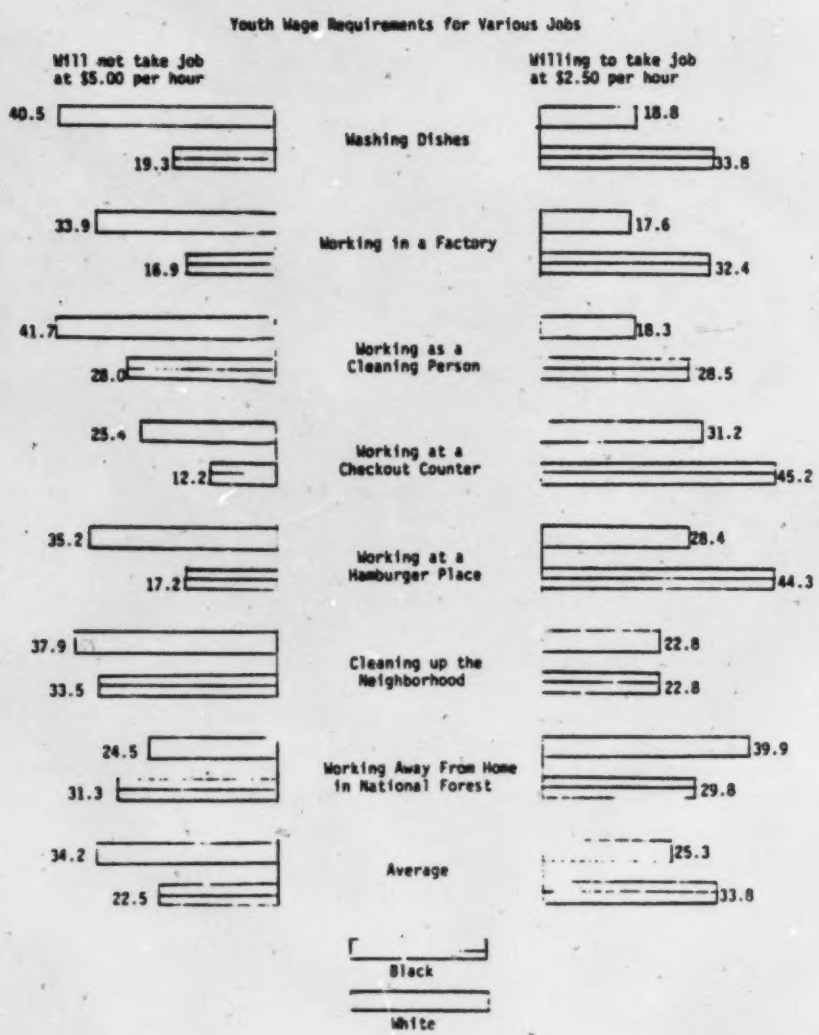
These various causes may be clustered into four categories: those related to job deficits; those related to individual skills deficits; those related to discrimination; and those related to socialization or the culture of poverty. Obviously, there are interactive effects among all these possible causes. Young black women may turn to welfare because of the lack of earnings options, but welfare may provide disincentives to employment. The experience of discrimination may lead to negative atti-

tudes about work. The lack of transportation may discourage job search and might increase the reservation wage. Obviously, some of these causes are particularly responsive to public policies while others are less so. Provision of bus tokens is possible, but provision of a public transportation system or economic development to generate jobs are not viable alternatives as youth employment policies. Mobility, for instance through the military or Job Corps, may be an answer, but not until a certain age. Work and welfare have complex interactions, but the impediments to substituting workfare for welfare are greatest for the youngest recipients who have the youngest children as well as the most limited employment options. They are very few effective policies for curtailing employment discrimination in youth labor markets. Finally, motivational efforts might seek to compensate for the negative socialization, but it is unclear how well these work.

The findings of the youth knowledge development activities can help to specify the relative significance of these factors, to identify the interactions, and to help determine their responsiveness to policy interventions. The result will not be precise answers, but a shift in the weight of evidence and judgement about the balance of interactive factors and the most appropriate actions. For instance, the evidence from the research has documented severe human resource and job deficits, but provided less support for the attitudinal explanations that black, school-age youth do not want to work, or are more volatile, or are less amenable to interventions:

First, the new National Longitudinal Survey suggests that the significant differential in labor force participation rates between white and black students as reported by "official" statistics is a measurement artifact more than a behavioral reality. Put another way, black students want jobs just about as frequently as whites as measured by their self-reported job search behavior, and probably even more if discouragement is considered. The Current Population Survey finds a labor force participation rate of 22 percent among black students compared to 40 percent among whites, a gap of 18 percentage points. The NLS rates, which are undoubtedly more accurate because they address the questions to youths themselves rather than heads of households, are 54 percent for whites and 50 percent for blacks, a differential of only 4 percentage points. On the other hand, the unemployment differential is larger in the NLS, and the number of unemployed black students in the NLS is almost double that in the CPS.

The explanation that black youth do not want to work or have high reservation wages is not supported by the evidence. The National Longitudinal Survey asked youth age 14-21 whether they would take certain jobs at various hourly wage levels. At a wage of only $2.50 per hour--a seventh below the minimum wage at the time of the survey--a third of black youth would take the most menial jobs washing dishes, 29 percent working as a cleaning person and 23 percent cleaning up neighborhoods. Black youth were willing to take all of the proposed jobs at a lower wage than whites (except for working away from home in a national forest); even if responses were biased and would not reflect actual behavior, there is no reason to expect a differential in the degree of bias for black and white respondents.



The Entitlement program offers an actual test of whether youth want to work or not. Blacks represented three-fourths of the enrollment in the program. This was not just a matter of the Entitlement areas selected. In Baltimore the enrollment rate among eligible blacks was nearly five times that of eligible whites. In Cincinnati and Mississippi it was twice as great. In Denver, the black enrollment rate was 2.3 times the white rate.

The charge that black youth cause their own problems by higher volatility is also not supported by the evidence from the NLS. Two-fifths of black males, compared to only a fourth of whites, were laid off their last jobs as opposed to quiting or being fired or because employment conditions were unacceptable. This is despite the fact that black males

were paid less ($3.57 on average compared to $3.84), worked in less attractive jobs (14 percent in craft or white-collar jobs compared to 21 percent among whites), had to commute longer to get to the jobs (only 21 percent within 5 minutes of work compared to 36 percent of whites), and were less likely to have jobs they considered responsible and instructive.

Black youth must overcome more serious barriers to employment, i.e., they must have a greater commitment to work than a white youth in order to achieve equal success. Race discrimination is perceived by a fifth of black youth. Sex discrimination is noted by 17 percent of black females compared to just 13 percent of whites. Lack of transportation is perceived as an impediment by 37 percent of young black females and 43 percent of black males compared to only 31 percent and 25 percent respectively among whites. In the school-to-work transition programs, nonwhites gains as much or more than whites according to in-program measures of employability skills and attitudes, but adjusted for differences in age, education, reading level and income status, the post-program success rates of blacks are dramatically lower. For instance, black YCD participants had a 23 percent probability of employment full-time at the three-month follow-up compared to 35 percent among whites, after adjustment for other factors.

This cursory synthesis hardly taps the surface of the research, evaluation and demonstration findings, yet suggests the potential for greater resolution concerning the causes of the severe conditions for black youth. Very clearly, there will be no simple explanations and no exact weights attributed to any set of causal factors. But the evidence can help to better establish the relative weights given to different explanations and, hence, the relative weights given to alternative interventions. The evidence so far from the knoweldge development activities tends to downplay the significance of attitudes, job related behavior or reservation wages and to emphasize the importance of job deficits, skill deficiencies and discrimination as explanative factors.

Measurement Issues

The ecoomically disadvantaged youth who enter CETA programs are an enormously diverse group. Controlling for age, sex, race, family status, income and education does not go far towards sorting the likely winners from the likely losers. This is suggested by the limited predictive power of most regression equations, particularly those applied within groups already sorted by socioeconomic status. The disadvantaged youth in one program, or one area of the country, may be significantly different from those in another despite the similarities in major demographic features. In assessing who is being helped, the magnitude or significance of impacts, or the effectiveness of programs, it is necessary to consider those hard-to-measure differences.

Major emphases of youth employment and training programs include personal and character development, improvement in work habits and attitudes, and increased information about jobs and employers in order to make better career choices. The immediate payoff for in-school youth is not a job; frequently it is more education, or a different type of education, or a different type of job. For youth who are not yet in the

labor market full-time, the immediate measurable effects on status are slight. Outcomes are a limited indicator of whether youth are, indeed, learning more about jobs, whether they are maturing, becoming more dependable or gaining confidence in their abilities.

Measurement of the attitudes and skills which increase employability is problematic. While there are a variety of tests purported to measure work attitudes, sex stereotypes, job awareness, maturation, self-esteem and the like, there have been few tests of their relevance for disadvantaged youth, and even more limited tests of their predictive potential. Bias is possible in any test, while reading and test-taking skills may have little to do with real attitudes or likely performance in the labor market. For a test to be of practical utility it must be relatively short and understandable; this limits the range of its applicability, the dispersion in scores and hence the degree of its capacity to differentiate between individuals. It matters significantly when a test is given and how; even short tests which are forced on operators will be considered an unnecessary burden and are not likely to be given under uniform conditions.

Recognizing all these problems, it was still considered important to try to improve the state-of-the art in attitude and basic skills measurement. Working with the Educational Testing Service, the Office of Youth programs screened the best validated previous measures as well as the most reasonable and available instruments, and created a battery including seven subsets--three designed to measure work-related skills and four to measure work-related attitudes. The skills measures included: (1) a job knowledge test with 33 items containing pictorial and verbal choices dealing with various job qualifications, requirements and tasks; (2) three job holding skills tests with 11 items requiring one of three alternative responses to depicted situations; and (3) a job seeking skills test, with 17 items testing knowledge of how to begin employment search, interpret information and fill out job applications. The four attitude measures included: (1) a vocational attitude scale with 30 questions to measure decisiveness, involvement and independence in career decisionmaking; (2) a work relevant attitude inventory, with 16 items seeking to assess views about jobs, appropriate ways of behaving in job settings and general feelings about work; (3) a self-esteem scale with 15 items developed to assess perceived self-worth in terms of achievement in various social, vocational and educational settings; and (4) a measure of sex-role stereotyping with 21 items relating to views about the appropriateness of males or females holding certain jobs.

No single feature of the knowledge development effort has generated more controversy than use of the psychometric battery as one part of the Standardized Assessment System. There are logistical problems in applying the test, even though it was designed to be completed in less than one hour. Understandably, neither local program administrators, new enrollees nor terminees proved very interested in abstract tests which had no immediate implications. Even though the test had visual components and the questions were to be read to participants, there remains doubt about its applicability to extremely disadvantaged youth who are intimidated by test-taking. For more advantaged youth some felt the tests were too simple. Finally, there were many who argued against tests per se, some feeling they might provide inaccurate measurements and others that they

would, because of their crudeness, yield no evidence of positive changes even though the programs were having impacts on employability skills and attitudes.

What has been learned about the validity of these measures? Are they worth the effort? The major application of the psychometric battery for which results are currently available has been in the YCD school-to-work transition demonstration plus the various summer demonstration and evaluation projects. These offer some evidence about the meaning and validity of the tests:

First, it appears that for the "typical" participants in summer and income targeted in-school programs, there is sufficient range between mean and highest possible scores to preclude a ceiling effect (except in one of the subsets of questions). The standard deviation of the scores relative to the averages suggests reasonable variation (again, except in the case of one of the subsets). The subsets also have a reasonable degree of reliability considering the limited number of questions, i.e., alternative questions on the subsets tend to be answered in a consistent fashion. Another way of stating this is that the battery and its subsets measure "something" for which there is reasonable variation within the recipient population, few ceiling effects and reasonable consistency of response.

Second, the seven subsets of the psychometric battery are intended to measure different attitudinal and skill dimensions of employability. There are, however, statistically significant intercorrelations between individual scores on the subsets. The cognitive measures, particularly job seeking skills and job knowledge, are more highly interrelated, as are the like attitudinal subsets, vocational attitudes and the work-relevant attitudes inventory. The cognitive measures are more highly related to reading scores than the attitudinal measures, also as expected. In general, then, it appears that the scales address, as intended, overlapping dimensions which might best be characterized as attitudes and skills.

Third, when test scores at entry into YCD for each individual are compared to status variables measured at completion, there are a number of correlations, for instance, with willingness to participate in future training, awareness of job characteristics, counselor ratings, and feelings of vocational adequacy. However, the percentage of the variance in completion ratings on these various dimensions which is explained by variance in entry scores or any one of the subsets never exceeds 27 percent and in most cases is in the 10-20 percent range.

Fourth, the entry test scores are related to the likelihood that when the youth are tracked three months after leaving school they are occupying higher level jobs, are satisfied with those jobs, are willing to go on to further training, and are seeking higher status jobs. There are relationships between entry scores on the vocational attitudes, work relevant attitudes and sex stereotyping tests and subsequent knowledge about preferred jobs. Those with more favorable attitudes at entry are able to find jobs more quickly. Again, variance in score on the separate subsets of the battery at most explains only 28 percent of the variance in any of the status or attitudinal dimensions at the three-month follow-up point, and usually explains only 10-20 percent.

Fifth, there are statistically significant differences between the gains of YCD school-to-work transition program participants tested at entry and exit and like control group members tested at the same times. This holds for all of the subsets of measures except self-esteem. However, no relative gains are registered for participants in the summer demonstrations, even those emphasizing classroom training and other enrichments rather than just work. Typically, a summer program provides 200-250 hours of participation whereas an in-school program of 10 hours weekly over the school year would yield twice the hours of participation. It might be hypothesized that the measurements are too crude to pick-up changes produced by shorter-term experiences, or that summer programs simply do not produce changes.

Sixth, for YCD participants statistically signficant relationships exist between gains on the tests and the likelihood of positive status three months after the end of the school year. For instance, those who gain signficantly on the vocational attitude test, 18 of every 100 are employed in the post-period in skilled or semi-skilled jobs compared to 9 of 100 who are among the lowest gainers. The gainers may be those who are more highly motivated or able, i.e., the gain may or may not be induced by program participation, but it does suggest that the gain measures are, indeed, predictors of outcomes.

Probabilities of Desired Labor Market Outcomes Occurring Depending on Whether a YCD Participant is a "Big" Gainer, or "Below Average" Gainer on Each of the Psychometric Instruments

Standardized Assessment System Psychometric Battery Subtest	Prob. of Full-Time Employed (1)	Prob. of Present Job Being Semi-Skilled or Skilled (2)	Prob. of Aspiring to Skilled or Semi-Skilled Job (3)	Prob. of Working or Going To School Full-Time or Doing Both Part-Time (4)
Voc. Att.				
Upper Quartile (Q_1)	29	62	82	71
Lower (Q_4)	25	35	73	56
Job Knowledge				
Upper Quartile (Q_1)	31	50	84	75
Lower (Q_4)	25	44	83	52
Job Holding Skills				
Upper Quartile (Q_1)	25	53	88	65
Lower (Q_4)	24	43	74	65
W R A T				
Upper Quartile (Q_1)	28	55	85	77
Lower (Q_4)	26	42	86	64
Job Seeking Skills				
Upper Quartile (Q_1)	22	54	89	71
Lower (Q_4)	25	38	89	58
Sex Stereotypes				
Upper Quartile (Q_1)	24	58	86	70
Lower (Q_4)	23	40	77	64
Self Esteem				
Upper Quartile (Q_1)	20	59	83	68
Lower (Q_4)	29	26	78	65

Finally, it also appears from the early evidence that projects which are most successful in improving employability skills and attitudes as measured by the subscales are not necessarily most successful in improving post-program outcomes. As an example, the Jobs for Delaware Graduates (JDG) program which uses a specially-created, business-oriented but broad-based intermediary approach to provide transition services in-school has been evaluated by the Standardized Assessment System just like the Youth Career Development program, which is operated mostly by community-based groups and puts much greater emphasis on personal and character development. The YCD produced statistically significant gains for experimentals relative to controls on 5 of the 7 psychometric scales compared to statistically significant gains on only 2 of the 7 measures for JDG participants. Of critical importance, however, JDG participants gained most on job seeking skills and job holding skills, i.e., where the program placed its greatest emphasis.

Difference Between Gains of Experimentals and Controls
as Percent of Standard Deviation of Pretest Scores on Each Measure

	YCD	JDG
Self-esteem	.004	.096
Sex stereotying	.239	.073
Job seeking skills	.175	.227
Work relevant attitude	.156	.012
Job holding skills	.099	.160
Job knowledge	.077	-.021
Vocational attitudes	.142	-.140

There was an enormous difference in three-month follow-up results--particularly in the percent of participants working full-time and in the differential between experimentals and controls. In JDG, 55 percent of participants were working 3 months after graduation, compared to 25 percent of those in YCD. The proportion working full-time for experimentals was 17 percentage points higher than for controls in JDG, whereas it was only 2 percentage points higher in YCD. On the other hand, JDG youth were less likely to be in school or training subsequently, in fact, the percentage declined for JDG youth relative to controls.

A number of factors may explain these patterns and remain to be explored, but the fundamental point is that there is very much a need to differentiate between in-program changes and impacts on immediately measurable outcomes. One program may improve self-esteem which can make a lifetime difference. Another may help immediately by placement into a short-term job without any real impact on attitudes, skills or behavior of the individual. A third may teach the individual to find his or her own job, which may lead to confidence and a continued higher probability of success. A fourth might simply screen individuals, pick out the winners, and leverage them into better jobs which would otherwise be denied. All would have different in-program and likely post-program effects, and both in-program and post-program changes must be considered to better identify such processes.

In summary, the psychometric battery introduced into most program assessments through the SAS may not be the best possible tool for measuring

level and change in employability attitudes and skills. Any set of tests may provide only crude estimates of employability. Yet even crude measures aid in and are necessary for evaluation if utilized with an understanding of their limitations. The SAS psychometric battery can unquestionably be improved, and, indeed, one of the basic knowledge development aims underlying this system was the goal of improving measures and testing their predictive and analytic potential. The new youth legislation, for instance, introduced the notion of "benchmarks" to measure individual competencies and accomplishments, as well as program impacts on them. The benchmarks were to be based on a combination of participant performance, completion of certain experiences and tested competencies. The counselor and supervisor ratings, and the psychometric tests of the SAS may well be integrated into suggested benchmarking systems. Certainly the research will help inform decisions so that the scales adopted are based on proven predictive and measurement reliabilities and are used with recognition of the demonstrated limitations. In other words, the SAS measurement efforts are not only important for refining evaluation findings, but also for the potential operational applications under the youth programs of the future.

Judgemental Knowledge

A major thrust of YEDPA was to promote institutional coordination, particularly between the schools and CETA prime sponsors in order to minimize counterproductive confrontation and friction between local institutions, to avoid needless duplication of services, and, more positively, to draw on the comparative advantages of local institutions as well as to better link workplace and classroom activities. The chief mechanism was a legislative set-aside of 22 percent of funds that could only be used for in-school programs under terms of an agreement between prime sponsors and local education agencies. A range of regulations and technical assistance efforts were also addressed to the linkage objective.

Linkages may be of many types and degrees. They may involve formal contracts between delivery agents and other local institutions, in-kind contributions such as the use of classrooms and offices in schools, formalized nonfinancial agreements, or simply cooperative arrangements to share services, clients or expertise. Any arrangements may be window-dressing or may be essential for operations. They may be involved only at the beginning or end of activities, i.e., in planning, recruiting, placement and follow-up, or they may be vital for day-to-day service delivery.

Linkages have obvious benefits but also some potential costs which need to be considered. Where contributions can be garnered or services provided from sources other than the funding agency, the reported costs may decline but this does not necessarily reduce social cost. In fact, this may be higher if the linkages must be "bought," for instance, the "one percent set-aside" under CETA going to state education agencies for linkage activities between education and prime sponsors. Time and effort are necessary to forge linkages locally. Instability may result from increased interdependency. Analyses of implementation and program operation processes have suggested that with each added layer of decisionmaking and review, and with each additional juncture point between institutions which

is essential for the implementation and operation of the activity, the risk of delay and the likelihood that something will go wrong multiplies.

Inordinate policy attention has been devoted to the issue of co-operation and coordination considering the fact that there are serious difficulties in measuring the degree of linkage, much less determining whether the benefits outweigh the costs, and what mechanisms are best for assuring that they are achieved.

To fill the knowledge gap, a wide assortment of studies were implemented concerning education/CETA linkages under YEDPA. Perhaps the most comprehensive was a case study assessment, conducted by the National Council on Employment Policy, of the first two-years of YEDPA experience of 37 prime sponsors. The validity of such case study findings depends on the judgement of the site observers, but even more on the judgement of the synthesist who summarizes the diverse local fundings. The availability of separate case study materials permits secondguessing of the latter judgements, but only the most dedicated readers are likely to pore through hundreds of pages of materials to form their own opinions. As an example of the inherent difficulties in utilizing judgemental information, the following conclusions are excerpted from the NCEP case studies:

- "Four of the five sample prime sponsors had long-standing relationships with the schools in their districts, including local education agency (LEA), vocational education and career education divisions. LEAs participated in the planning of CETA programs, and acted as program deliverers for in-school youth. The advent of YEDPA, therefore, was not a significant factor in improving the interaction of prime sponsors with LEAs in these areas. Only in Sonoma, where there had been very little history of LEA-CETA cooperation, did YEDPA result in institutional change."

- "Before YEDPA there was no "appreciable" contact between the Hartford prime sponsor and LEAs in the CETA planning process, nor was there much contact after YEDPA....The school boards in the other Consortium towns had only limited contact prior...to YEDPA, and...have absolutely no direct contact with the prime sponsor presently."

- "In the balance-of-state the six Regional Education Service Centers, which serve as the LEAs, had been engaged in a variety of career education and counseling services. While some of the ESCs had earlier sought and received CETA support... YEDPA seems to have significantly increased the direct role of these six LEAs in the CETA process."

- "Prior to YEDPA, there was considerable contact between the Waterbury school system and CETA. It helps that both agencies share space on the same floor in the same building. More importantly the large youth element in Titles I, II and VI had necessitated considerable interaction, particularly under Title I where about 60 percent of the programming for youth had been for in-school programs, given the substantial

austerity under which the schools have labored in working for non-YEDPA youth."

- "The schools (in the Michigan prime sponsors in the sample) differ in their sophisticalation and approach. The lack of any significant guidance aimed at LEAs from state and national agencies has exacerbated the gap between those LEAs with previous manpower experience and the neophytes. Undeterred by such lack of familiarity, however, even the new LEAs are generally solidifying their relations with the prime sponsors and expanding the nature of their institutional participation. Drawing on their experiences during the first year, the LEAs and prime sponsors are usually working jointly to implement the agreements reached in principle during the first year."

- "LEA agreements are generally the work of school proposal writers; only in Rockford has the CETA office been a major influence in the design of LEA programs. CETA staff in Cook County may call for minor adjustments to proposed programs, but do not affect their content any more substantially than does Chicago's hands-off method.

  Regardless of the degree of freedom accorded them, LEA spokespersons across prime sponsorships claim they are chafed by prime sponsor restrictions and/or program elements required by the regulations. The lesson appears to be that LEAs resent guidance from any external source... One of the unanticipated aspects of YEDPA in the schools is the absence of any apparent conflict between the youth programs and the vocational education programs. Although one might have expected vocational education administrators to guard their turf against YEDPA, very little of that took place. In fact, we could more readily document the possibility that vocational educators welcome YEDPA because it tends to absolve them of the responsibilities for training and placing disadvantaged youths."

- "It is in Charlotte, a most unlikely place for partnership between CETA and the schools, that the most significant progress can be noted.

  'When I first heard of this thing,' the head of vocational education for the school system told us, 'I felt sure that we would not be able to participate. I wanted us to be in but I felt there was no way the school board and the CETA people could agree to work together.'

  But CETA approached the schools anyway, with an offer for 22 percent of YEDPA.... In the end, an agreement was worked out, in part because both the schools and CETA management felt an obligation to work together, and in part because the schools did not wish to pass up money that could be used to improve their ability to help certain students.

Also, the vocational education chief for the schools was responsive to the opportunity and served as a spokesman within the school system for CETA's potential...'

"At the end of the fiscal year, there were no party favors or champagne, but there was no doubt either that the schools would participate in the fiscal 1979 program. Meanwhile, over at CETA, there had been administrative changes designed to make the program go smoother, and other wrinkles were being ironed out."

- "While YEDPA merely strengthened pre-existing planning and operational linkages between CETA staff and school districts in Portland and some of the Oregon subgrantee areas, its impact was more dramatic in other prime sponsor areas. Lane County, where youth programming had previously been focused on out-of-school youth, used 22 percent of its YETP funds to establish new linkages with local school districts for serving high school students. Individual school districts developed their own proposals and were responsible for coordination and staffing of in-school components. Kitsap County also used YEDPA funds as a basis for launching a new in-school program. Through coordinative agreement with a vocational education skills center, Kitsap was able to establish programmatic linkages with six local school districts."

Obviously, the experience differed from area to area. How does one generalize from this diversity? Were the changes significant, encouraging or expected? They were summarized in the following way in the overview by the director of the National Council on Employment Policy:

"One of the most visible of YEDPA's institutional change objectives was to establish a role for local education agencies in the prime sponsor employment and training service matrix. In the vast majority of cases studied, there has been positive movement. Occasionally there have been quantum leaps in the degree of collaboration and program sophistication.

Progress has been most noticeable where there had been little or no pre-YEDPA contact between sponsors and schools. Under YEDPA education and manpower administrators at least started talking together. But substantive progress has been hard to estimate because a great deal of energy was devoted to simply opening communications. The short program year in fiscal 1978 also encouraged sponsors and schools alike to refrain from major changes for the second year.

In the areas where schools and sponsors had collaborative arrangements predating YEDPA, the new legislation added to what was already there but also led to attempts to better rationalize program components and institutional relationships.

> Substantively, the LEA programs are geared mostly to provide labor market services, including vocational exploration (work experience) under the auspices of schools. As a rule, these programs do not capitalize on the unique capacities of schools except to provide services to the in-school population. There are a few instances, however, in which schools have taken steps to establish alternative education programs providing more than just labor market services for dropouts. Generally, though, there is only limited evidence of institution building in the form of schools adding staff or providing training to increase the school service capacity.
>
> There have been both procedural and substantive sticking points in CETA-LEA relations. Time and program continuity are indispensable for getting past those humps. Experience in areas with longstanding CETA-LEA relations bears this out, as does the widespread preference among sponsors to leave their 1978 programs and LEA shares intact for 1979.
>
> The problem with trying, as a matter of federal policy, to get CETA sponsors to collaborate with non-CETA agencies, such as local schools, is that the sponsors are the only players under the federal thumb. The Department of Labor can use the force of statutes and regulations to push the sponsors into collaborative relationships, but must rely on persuasion and the creation of credible incentives to get non-CETA agencies involved. This has meant that the process by which schools and sponsors have implemented joint activities under YEDPA has been time-consuming and idiosyncratic."

This would appear to be a reasonably straightforward and objective interpretation of the findings of the case studies, although the choice of adjectives such as "vast majority," "quantum leaps," "limited evidence," or "widespread preference" can be questioned by either advocates or detractors with minor editorial changes resulting in a major difference in time. Yet in summarizing the summary report, two of the major organs for the education and employment communities portrayed a significantly different sense of the message. Under the heading, "Sponsors Progress in School-CETA Ties," the Employment and Training Reporter said the following:

> "The most significant progress made in youth employment and training programs during the past two years may be the strengthening of ties between schools and CETA programs according to an analysis of prime sponsor experiences in implementing the Youth Employment and Demonstration Projects Act. 'On the whole, the collaboration...is at a very basic level with an uncertain future, but the gap has been bridged, at least temporarily,' says the National Council on Employment Policy report released last week."

A somewhat more jaundiced view was presented by the Manpower and Vocational Education Weekly, under the heading, "YEDPA Only Partly Successful in Helping Schools Better Serve the Poor, Study Says":

> "An 18-month look at the Youth Employment and Demonstration Projects Act shows it has had only limited success helping schools improve their services to low-income students....Despite a big push to forge broad-based collaborative ventures between schools and job training agencies, YEDPA programs 'as a rule...do not capitalize on the unique capacities of schools except to provide services to the in-school population...' Schools have used YEDPA money 'mostly to provide labor market services, including vocational exploration [work experience],' said the report, although there are a 'few instances' in which schools have created alternative programs for low-achievers and potential dropouts.' But in general, 'there is only limited evidence of institution-building in the form of schools utilizing or providing training to increase the school service capacity,' the report noted."

It is clear that a change in the ordering of the material, or in a few key words, can make all the difference in the world. Where quantitative information is provided, distortions can also occur, but at least there are some statistical tests of significance and the data may speak for themselves without secondary interpretation of scale and incidence. But where the judgements are qualitative, there are no procedural groundrules for handling the evidence. While there is uncertainty about the accuracy of individual case study judgements, the number of observtions probably balances any biases and the analysts have touched and felt what they are describing. At the summary level this may not be the case. The synopses of the summary are even more divorced from the raw material. The most useful information is that at the lowest denominator yet the most used information is the synopsis of the summary. True understanding is rarely achieved through capsulization.

The NCEP study was aimed at determining whether agreements were signed and amenable relations established, and whether joint activities were funded as a result. The more critical question which could not be addressed by such process-oriented observations was whether the activities resulting from linkages are more efficient and effective in meeting the needs of youth. The substantial difficulties in measuring whether linkages do or do not exist are more than matched by the difficulties in assessing whether linkages do or do not have favorable impacts. The issue has rarely been explored in any rigorous way. Yet some interesting new information has resulted from the knowledge development effort which may potentially yield important insights. The Project Information Questionnaire of the Standardized Assessment System seeks to assess in a quantitative way for each local project within the various demonstrations such information as the incidence and importance of linkages with various local institutions. There are two matrices filled out by the local project administrators, one noting the presence of linkages by type (including informal working relationships, formal written agreements, as well as contractual relationships), by the institutions with which they are linked, (CETA prime sponsors, CETA Private Industry Councils, other local government agencies, other federal agencies, local public schools, post-secondary schools, private-for-profit institutions, local and national community-based organizations, organized labor, private employers and state agencies), and

by project dimension affected (design and planning, administration, recruiting or outreach, service delivery, and placement or follow-up). The linkages are ranked as (1) not important, (2) somewhat important, (3) very important, and (4) essential. The ranking is, of course, judgemental; linkages are in the eye of the beholder; and a contract or agreement may be nominal or the source of real interaction just as a working relationship may be fruitful or a courtesy. The local administrators are probably the best judges, although there is not necessarily uniformity in the standards they use to define importance and essentiality.

The linkage information has been analyzed for a large sample of school-to-work transition projects. All were found to have at least one linkage considered essential by the project administrator. Nine of ten had linkages with local public schools or post-secondary institutions considered very important or essential. Over four of five projects claimed to have linkages with private employers or unions that were very important or essential, and three of five with community-based organizations. In planning and design, three-fifths of projects had essential linkages with two or more sets of institutions. In service delivery, the proportion was over half. A substantial minority of projects required the effective functioning of three or more essential linkages--27 percent of projects in their planning, 10 percent in administration, 9 percent in recruitment and outreach, 22 percent in service delivery, and 19 percent in placement and follow-up. These linkages were of many types, but most frequently cooperative rather than formalized in agreements or involving in-kind assistance. Four-fifths of projects had a cooperative working relationship with prime sponsors or private industry councils. There were relatively few contractual relationships with the schools, yet nearly three-fifths of projects had formal nonfinancial agreements and half received in-kind contributions. Most linkages with employers were cooperative. Interestingly, more than a fourth of projects reported in-kind contributions from employers or unions.

The linkages were frequently used to arrange services or activities for some or all participants. Half of projects arranged eligibility certification through linkages, two-fifths arranged counseling, work experience and vocational training, respectively, through linkages; a third arranged for recruitment, supportive services and placement, respectively, through linkages.

There was also wide variation in the incidence of linkages across projects. For instance, nearly six of ten projects had essential linkages with local public schools for service delivery but a tenth had no linkages with the schools for service delivery. The importance of linkages for each project may be assessed in terms of the aggregate linkage score--i.e., the sum of the Likert scale rankings (1--not important to 4--essential) across all dimensions and for the major institutions. Dividing the projects roughly into thirds by this aggregate linkage score, the characteristics of projects with significant, moderate and limited linkages were compared. The highly-linked projects tended to be larger, less intensive and to put relatively more emphasis on providing information about jobs and employers, brokering placement, and providing follow-up support services than on personal and character development, improvement in work habits, training or education. In other words, the highly-linked projects were more oriented

to intermediating between youth and the labor market, while the less-linked projects were those focusing on human resource development to prepare youth to better compete in the labor market. Highly linked projects were somewhat more likely to provide participants with vocational exploration, placement and job development and follow-up than projects with limited linkages. They tended to put less emphasis on work experience or on-the-job training. Linkage helped to supplement project budgets and services. For projects in the limited linkage category, the mean percentage supplementation from outside sources was a tenth; for the moderately-linked projects, it was a fourth; while in the significantly-linked projects, in-kind and financial contributions equaled two-thirds of direct project funding. Highly linked projects were less likely to have undergone significant modification than limited-linkage projects, perhaps because the latter had to develop all the components themselves and had to change as lessons were learned. Linked projects were able to phase up to full enrollment relatively quickly once they got started. And they tended to exceed planned peak enrollment figures as opposed to the less-linked projects. On the other hand, the highly-linked projects took longer to get underway, had higher director and staff turnover, and a lower level of capacity utilization (peak school vs. average monthly enrollment during the school year).

In summary, the new evidence suggests that there are a number of essential linkages which must be forged for school-to-work transition projects to operate. Most projects are linked with more than one set of institutions. Increased linkages are necessitated when emphasis is placed on labor market intermediation as opposed to human resource development. Linkages reduce youth grant costs and increase services from other sources, particularly placement, follow-up and vocational exploration. Projects which try to "go it alone," are more likely to require modification. Projects with linkages take longer to get underway, experience initial instability, but subsequently stabilize and reach their goals. The evidence does not shed light on the costs of linkages or the efficiencies which might be achieved thereby, but certainly there is no evidence to support the extant theory from the very limited literature on implementation processes that linkages which necessitate agreement among multiple actors will multiplicatively increase probabilities of failure. Put another way, there appear to be some benefits associated with linkage while the negative consequences seem limited. Thus, it is possible to quantify some judgemental issues and thereby to gain insight into patterns of relationship that might not be visible to observers who can only review one or two projects in operation. Quantification is a way of handling information at a more detailed level and translating it into summary judgements in a clearcut way. It is not a substitute for observation, but a necessary complement.

Yet if linkages are worthwhile, and if they, in fact, have been achieved under YEDPA though with varying success in different local contexts, what are the instrumental variables, i.e., how can increased linkage be achieved? Whatever occurred under YEDPA resulted from several factors: extensive cooperation at the federal level, substantial use of incentive funding for school-related discretionary projects, regulatory requirements to arrange academic credit for work experience and to sign agreements with local education agencies, consistent exhortation from the

Department of Labor in favor of cooperation, unprecedented collaboration at the national level by the Office of Education, and the fact the new funding was directed down only the CETA pipeline, a federalized system, so that education had to cooperate to secure resources.

Based upon assessments of substantially the same information, which included but was not limited to the NCEP case studies, two of the major commentators on this subject reached completely opposite conclusions. Arguing for continuance of the 22 percent set-aside of funds specified by YEDPA, the director of the National Council on Employment Policy argued as follows:

> "The importance of the YETP 22 percent set-aside cannot be overstated. It has set in motion the forces necessary for genuine collaboration between the education establishment and the employment and training establishment. In isolated instances, usually where schools and CETA offices were already working together, alternative education programs and other joint ventures are thriving."

In arguing for the consolidation of CETA youth programs, the removal of detailed federal specifications about the use of funds, and the use, instead, of incentive grants for local implementation of specified in-school models of proven effectiveness, the Administrator of the Office of Youth Programs argued as follows:

> "It is widely assumed that because education/CETA linkages increased under YETP, that the 22 percent set-aside and the LEA/CETA agreement requirements were the key factors; and it is sometimes projected from this that more of the same is needed if further cooperation is to be achieved. Yet the 22 percent set-aside did not really "torque" the sytem since under Title I of CETA in 1977, more than half of the enrollees were under in-school programs and in fact, the aggregate mix of youth activities in local CETA-funded programs changed little after the implementation of YCCIP and YETP. LEA/CETA agreements in most cases were general boilerplate statments. Real changes occurred where the extra resources under YETP provided the wherewithal for collaboration which had already been nurtured, and where primes and the schools simply got the message that cooperation was fashionable. The same collaboration might have been achieved simply by the mandate that when in-school programs were developed, there should be an attempt to involve educators more in the process. In other words, the procedures were a signal rather than the driving force in change."

If the existence of linkages or changes in linkages are difficult to measure, and the benefits and costs are even more problematic, determination of the best <u>means</u> to achieve linkages is doubly uncertain. As this example suggests, there is room for widely different interpretations of the same evidence depending on judgement standards and perspectives. The difficulties of assessing qualitative status and change are significant, but it is even more difficult to assess causal factors and whether or not past experience will be a guide for the future.

Clearly, then, there are problems in dealing with "soft" information about qualitative realities. What emerges are not facts but judgemental knowledge. The accuracy of these judgements rests on the quality and scope of the underlying facts, but also on judgemental frameworks. While there may be diminishing returns, more information, properly structured in a rational decisionmaking framework, can improve judgements. However, the frameworks need to be articulated and discussed as much as the facts.

Standards of Judgement

Quantitative findings have a compelling purity. There are relatively hard and fast standards for significance and reliability. Yet statistical significance does not imply policy or practical significance, nor does statistical reliability always reflect the usefulness of information. The fundamental issue is what standards are used to judge the policy significance of findings, and their credibility relative to what policy-makers and practitioners expect and understand. Defining the context in which results will be considered is as important as the results themselves. Several examples from school-to-work transition activities to date are suggestive of the contextual issues:

First, major emphasis has been placed on worksite quality and the use of standardized monitoring instruments to determine the incidence of inadequate worksites as judged by the level of supervision, compliance with procedural requirements, enforcement of time and attendance, provision of work to occupy youth, the level of supervision, safe and sanitary working conditions, and the learning potential on the jobs. As noted, the Regional offices of the Department of labor monitored 7,615 of the estimated 165,000 worksites in the 1979 Summer Youth Employment Program (supplementing the 332,000 documented worksite monitoring visits by prime sponsor staff). A nationally directed Special Monitoring Effort visited over 1,200 worksites in 11 cities, while the Office of the Inspector General used its own auditors and outside CPA firms to review 2,230 prime sponsors in a nationwide sample. In all cases, the monitoring instrument was essentially the same as that used in previous summer by the General Accounting Office.

A parallel monitoring effort of the Entitlement program was mounted by the Manpower Demonstration Research Corporation, reviewing 520 worksites from September 1978 to November 1979. During the same time, the General Accounting Office conducted its own survey of the Entitlement sites.

It is enlightening to look not just at the results of these monitoring efforts, but even more critically at the varying frameworks for interpreting the findings. In 1978, the GAO concluded from its survey of summer program sites that less than half of participants in its sample were in sites with adequate supervision and worksite activity providing the opportunity to develop good work habits. The sample was heavily weighted by a few urban areas with troubled programs and was not representative of the national picture (as the fineprint in the GAO report indicated), yet critics trumpeted the conclusion that the summer program was nothing more than fun and games for half of participants. This criticism accelerated the efforts begun in 1978 to turn around the summer program, gave ammuni-

tion to budget cutters which resulted in reductions in 1980, yet also provided a baseline for proving the success of corrective actions. The Inspector General's review of the 1979 summer program found that less than a fifth of worksites were inadequate by the same standards used the previous year by GAO. The Regional Office monitoring visits found 87 percent of sites nationally satisfactory on first visit. The Special Monitoring Effort targeted to prime sponsors with expected problems, found that two-fifths of worksites had one or more serious problems, but that the incidence of inadequate worksites in the same cities surveyed by the 1978 GAO report was half as high as in the previous year.

Understandably, then, the Department of Labor trumpeted its successful turnaround of the summer program using the GAO standard as a baseline. It had been unable to explain to the public that the 1978 GAO sample was skewed and an inaccurate picture for the nation, so DOL was not particularly interested in highlighting this in 1979 when the low baseline magnified the improvement. Yet the ultimate issue should not be just the improvement, but whether a program is acceptable which provides "inadequate" work experience or supervision to a fifth of participants. Any standard must consider the severe employability deficits of the participants (few of whom have held other previous jobs), the likely incidence of problems at any jobsite as judged by point-in-time monitoring (any day a supervisor is absent or the workers "fooling around" the workplace would be considered inadequate), and the difference between inherent and correctable problems. Some might argue that a fifth of worksites with problems is an "acceptable" standard of performance. Others might feel that any evidence of "fun and games" is proof of failure.

The question of reasonable standards comes up again relative to Entitlement. In this case, the MDRC report set the baseline, since it appeared before the GAO report. MDRC found that only one in seven sites was inadequate--roughly the percentage for the summer program. Independent reviews reported that at 68 percent of sites youth were kept busy most or all of the time, at 19 percent some of the time, and at 13 percent rarely or never. Work supervisors reported 87, 8, and 5 percent respectively while youth reported 81, 14, and 5 percent respectively. A more critical observer might, thus, claim that 32 percent of sites were inadequate by this standard alone. This is the tack taken by the GAO report even though the statistical findings were roughly parallel those of MDRC. It found that 81 percent of worksites provided environments where youth were encouraged to develop good work habits, 73 percent provided enough useful work and 74 percent provided adequate supervision but the report also stressed that 42 percent of sites, with 50 percent of participants, lacked one or more of these elements. The Entitlement program is several times the summer program in scale and intensity. The preponderance of participants are concentrated in a few large cities. It was a brand new program, building up in just seventeen sites faster than several of the other national programs implemented under YEDPA. It was also a highly seasonal program since students mostly wanted summer work, so it had the problems of seasonal start-up as well as new program start-up. Thus, it might be reasonable to expect a larger share of inadequate sites in Entitlement than the large urban summer programs. If this were the standard, then Entitlement must be considered an overwhelming success. GAO analysts expressed in brief-outs a surprise at the overall high quality of worksites, but the summary report contained no hint of standards of reasonable expectation.

A more useful but also more difficult approach is to try to measure the value of output of work experience activities rather than simply the incidence of inadequate work. The conventional wisdom is that public sector jobs are not as productive as those in the private sector, and that youth work experience positions are the least productive of all. This conventional wisdom has never been carefully tested. Training, education, and other service approaches may yield greater post-program earnings gains for participants but they have no social output to offset in-program costs. Output must be considered in assessing whether to invest scarce resources in work or training approaches.

Work valuation is as much art as science. Easiest to assess is the supply price. This is the price that would have to be paid to an alternative supplier to produce the same output delivered by project participants. The output of supervisors is excluded and supply price is then measured per participant hour of work. The supply price per participant hour may be compared to the wage rate of regular workers as a measure of relative labor productivity. The value of output depends not only on the supply price, but also on the quality of output and whether there is a demand for the output. Quality and utility are more difficult to judge since there is no competitive market for the product.

Recognizing these judgemental issues, a variety of work valuation studies have been undertaken to narrow the range of uncertainty, i.e., to suggest whether output offsets a large or small portion of program costs. For a sample of assorted youth program sites in 1979, a professional estimator or appraiser experienced in the work being done provided an estimate of the cost of providing the output by the most likely alternative means. With a number of assumptions, the best estimate of the supply price per participant hour was $2.98 for the summer program, $2.12 for the in-school program, and $2.58 for the entire sample of youth projects. The wages paid averaged $2.89 so that the output offset nine-tenths of the wages paid. It is important to note that this survey excluded sites with zero productivity; these could substantially reduce the average. As a consensus estimate of all the studies which have been done, youth work programs probably return about two-thirds of their cost in output. While the exact figure may be subject to debate, it is clear that when the regulations are met and youth really do work, there can be a substantial product ofsetting program costs.

When work valuation efforts are completed under all the different knowledge development efforts, there should be a much better sense of relative productivity. But the fundamental issue is how to deal with the findings. Usually output is ignored in rough and ready comparisons of the unit costs of alternative interventions, i.e., public sector work programs involve more dollar outlay than training or the same as subsidies in the private sector, while resulting in fewer post-program gains, ergo, the latter are to be preferred. But it makes all the difference in the world whether the program impacts must offset the <u>total</u> cost of the work program or simply the cost net of the output. To the extent output was not previously measured and is substantial, fuller consideration would result in greater emphasis on work programs as opposed to service programs. It would also have implications relative to public vs. private sector oriented activities. In considering the value of public vs. private sector placement under a 100 percent wage subsidy scheme in both sectors, the private

sector must have very substantial in-program and post-program effects since the value of output in the public sector offsets social cost while the private sector output does not.

A third issue in setting standards for assessing performance is whether the aim is to determine the impact of an intervention, the quality of delivery of this intervention under demonstration conditions, or the likely quality once refinements are made. As an example, the three-month post-program outcomes of the YCD were not overwhelming for projects with an average cost per person year of $1,500 or per participant of $950. For every hundred participants (completing more than 60 hours), two more were employed full-time at the three-month follow-up point than a comparable group of nonparticipants, two more of the employed were in skilled or semi-skilled jobs, four more aspired to skilled jobs and one more was in school and working. Although the differences are statistically significant, it is questionable whether such gains would justify the outlays from a benefit-cost perspective. Yet what does this imply? Almost all the projects were intended for a full school year. Yet the 1978-1979 participants were in projects which mostly started after the begining of the school year, some substantially later. In the 1979-1980 school year, the stability rate of YCD projects (peak enrollment vs. average school-year enrollment) was a seventh above that in 1978-1979, evidencing stabilization with experience. There is a rank order correlation among sponsors between stability rates and in-program gain rates. Clearly, this is a factor in performance. A learning curve would also be expected in the quality of services and their impact per participant hour. It could well be that the measured impacts will double or triple for the 1979-1980 enrollees.

But more is at issue than hasty judgement. For each national sponsor in YCD, some projects worked better than others. If the poor ones were either corrected or terminated, the average would improve. Likewise, some national sponsors performed significantly better than others. If in refunding, only the successful sponsors were selected, this might increase the batting average.

In judging the effect of school-to-work transition activities rather than the implementation success probability, it might be appropriate to restrict judgement to sites that did not have operational problems, i.e., to those that were successful. This is perhaps best illustrated by the Entitlement program. One of its primary aims was to attract dropouts back to school to finish their education. The percent of out-of-school youth in Entitlement (i.e., returned to school) varied widely; it was 17.6 percent in Baltimore, 13.2 percent in Cincinnati, 8.9 percent in Denver and 10.3 percent in Mississippi. Baltimore began with and quickly expanded a diversified mix of alternative educational offerings which are necessary to attract out-of-school youth. Mississippi was largely starting from scratch in building its alternatives. Denver's program, because of severe administrative problems which led to freezes in enrollment, was not an entitlement program in actuality. If the aim is to assess the impact of a school-conditioned job guarantee on return-to-school rates, then Denver should be excluded. If the aim is to assess the impact of a balanced program which provides the education alternatives which are needed, then attention should be restricted to Baltimore. The GAO evaluation of Entitlement claimed that the experiment was more effective than a regularly

administered program of similar design would have been because of the active intervention of MDRC and the Office of Youth Programs. On the other hand, the Entitlement sites argued correctly that their administrative burdens were compounded by the research requirements.

Most often, questions about standards of judgment are not addressed until the end of the knowledge development process. By that time, the context may already be defined. On the other hand, there is the possibility that those with a bias, with early access to the results and an understanding of their implications, can, in fact, control the context inappropriately. All too frequently the findings become lost in debate over the appropriate interpretative context.

Opportunities and Challenges

The youth knowledge development effort presents formidible opportunities and challenges to social scientists as well as to policymakers and administrators at all levels. Never before has so much research, evaluation, and demonstration activity, backed by massive resources and the necessary authority, been directed in such a short period to the understanding of a major social problem. The volume of information which has been--much less will be--produced is almost overwhelming. Even with the inevitable shortcomings in execution, there is a massive quantity of useful, valid and new information.

There is a real danger that wisdom--or at least certitude--will be undermined by this knowledge explosion, and that our ability to develop and apply knowledge will be overwhelmed by information. At the same time, however, there is an opportunity to achieve a quantum leap in understanding and application. The information, and the activities which will produce it, are structured to a significant degree, effectively address key policy and practical questions, and have been executed with a comprehensive approach which increases the potential for synergy between different research, evaluation and demonstration findings. But it takes a good deal of knowledge of the structure of this research, evaluation and demonstration effort, as well as of each of its components, to access the full range of useful and useable information on any question. Even more critically, however, it takes a great deal of wisdom to validate, sort and apply this knowledge.

The findings of the youth knowledge development effort will, for the most part, confirm conventional wisdoms. This is particularly true of the lessons which can be applied locally, since to be useful in a range of circumstances, they must be both general and dependable, and conventional wisdoms tend to evolve by iterative screening down to these basic truths. There is, however, substantial utility in validating conventional wisdoms, packaging the information more rigorously and more usably, then spreading the gospel so that the wisdom becomes more widely accepted and applied.

Greater knowledge requires the wisdom and intellectual effort necessary to live with and benefit from equivocation. Increased information means knowing more about narrower questions, increasing the number of considerations and complexity of dealing with them. Knowing

details can lead to more informed judgements, if these are appropriately weighted. More refined programs and policies are possible than with generalized information. The wise policymaker, legislator or administrator, cannot live a lifetime seeking truth in one page memoranda. In other words, if more information is to be fruitful, those applying the information must be able to cope with greater complexity and volume.

Knowledge rarely resolves issues, it simply narrows the range of debate or uncertainty, shifting the balance of judgement in one direction or another. Such a process is usually incremental and unconscious. Knowledge is brought forward to support arguments. A new finding supporting one side will send the other scurrying for countervailing truth or minimizing the first findings. There is room for debate and countervailing argument about any social truth, but the weight of evidence in this give and take will gradually shift. However, it is possible to be overwhelmed by each marginal increment of countervailing knowledge, or to interpret the "give and take" as evidence that "no one knows what they are talking about." To reach balanced understanding, the rational structure of issues and questions must be understood so that findings can be appropriately graded, weighted and integrated into the balance.

Knowledge will remain qualitative, "soft" and judgemental. Even the most quantitiative, rigorous and objective knowledge rests on normative underpinnings. Certainly, judgement enters when the findings are translated into language understandable by policymakers and delivery systems. In the case of more qualitative and judgemental information, where there are no groundrules of statistical validity, it is important to penetrate as far as possible to the lowest denominator of information, since multiple layers of interpretation can distort judgemental findings even more than quantitative findings. Yet judgemental knowledge necessarily remains the chief source of understanding.

Many dimensions of the youth employment and development process and many impacts of interventions simply cannot be measured with desired precision. The Heisenberg principle applies in social as well as physical sciences--massive participant tests or data collection in programs can distort significantly what they seek to measure. Crude measures in many cases are better than no measures, but if the fish swim through the nets untouched because the mesh is broad does not mean that there are no fish in the sea. On the other hand, it does not necessarily mean that tighter nets are possible or expedient.

Finally, the significance of knowledge depends on the standards which are applied. Setting such standards, itself, requires a good deal of knowledge and understanding. Judgement standards must be consciously debated, discussed and revised as new knowledge is generated.

The youth knowledge development effort is producing the raw materal to significantly improve our understanding of and solutions for the problems related to youth employment. Information is not in short supply. The knowledge can be accessed, albeit with a good deal of work. The wisdom and commitment to use this knowledge carefully and with judgement are the scarce commodities which will, in the end, determine the payoff of the effort.